

Technical Report

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1	October 8, 2009	Revision of fluid saturation values based upon revised pore-water salinity of 200 g/kg brine Qualification of Swanson permeability values reported from mercury injection testing of DGR cores in Section 5.
2	May 20, 2010	Minor editorial changes to address NWMO comments

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1 Introduction

Intera Engineering Ltd. has been contracted by the Nuclear Waste Management Organization (NWMO) to implement the Geoscientific Site Characterization Plan (GSCP) for the Bruce site located on Lake Huron, Ontario. The purpose of this site characterization work is to assess the suitability of the Bruce site to construct a Deep Geologic Repository (DGR) to store low-level and intermediate-level radioactive waste. The GSCP is described by Intera Engineering Ltd., (2006, 2008).

As part of the GSCP, Intera Engineering Ltd. contracted with Core Laboratories, Houston, Texas to complete petrophysical testing of samples of core collected from borehole DGR-2. This report summarizes the results of the petrophysical testing of vertical and horizontal sub-cores of DGR-2 core samples including characterization of bulk density, permeability and porosity on “as received” and “clean and dry” cores, and fluid saturations. Mercury injection porosimetry testing was also conducted on vertical sub-cores of DGR-2 core samples.

Work described in this Technical Report was completed with data generated from Test Plan TP-06-10 – DGR-1 & DGR-2 Core Sampling and Distribution for Laboratory Testing (Intera Engineering Ltd., 2007a) and Test Plan TP-07-03 – Laboratory Petrophysical Testing of DGR-2 Core (Intera Engineering Ltd., 2007b), which were prepared following the general requirements of the DGR Project Quality Plan (Intera Engineering Ltd., 2009).

2 Petrophysical Testing Program

Core samples of 76 mm diameter for petrophysical testing were collected during diamond coring of borehole DGR-2 at the Bruce site during May and June, 2007. All core samples were vacuum sealed within nitrogen flushed polyethylene and aluminum foil/polyethylene bags following core retrieval and the general preservation and handling requirements of TP-06-10 (Intera Engineering Ltd., 2007a). Twenty preserved core samples from borehole DGR-2 were shipped to Core Laboratories under chain of custody procedures (following procedure DGR P4) on June 4, 12 and 26, 2007. Samples were collected from the Queenston, Georgian Bay, Blue Mountain and Collingwood shales, from the Cobourg, Sherman Fall, Gull River argillaceous limestones, and from the Cambrian sandstone. CoreLab reported that the sample bags appeared to have arrived without rupturing in transit. Table 1 (prepared and incorporated by Intera Engineering Ltd.) lists the Intera sample identifier, the corresponding Core Lab sample number, the corresponding geologic formation and a sample description for the 20 samples selected for petrophysical testing.

Core plug subsamples (5.1 x 3.8 cm) were drilled from the DGR-2 whole core samples provided by Intera Engineering Ltd. using humidified nitrogen as the bit lubricant. Twenty vertical and seven horizontal plugs were drilled from the depth range of 457.66 to 845.96 meters. After being drilled and shaped into right cylinders, samples were submitted for analysis for basic rock properties and Dean Stark fluid saturations, and subjected to high pressure mercury injection testing to determine pore-throat radii and capillary pressure vs. fluid saturation characteristics. Testing was performed at a depth-specific net confining stress (16.6E-03 MPa/m) for each sample; this estimate of stress change with depth was arrived at by consultation between CoreLab, Intera and Professor Dougal McCreath, its geomechanical consultant. The net confining stress approximates the effective stress considering the overlying weight of the bedrock formations. Table 2 summarizes the sequence of petrophysical tests completed by Core Laboratories for each DGR-2 core sample.

Basic rock properties tests were first performed on the “as received” vertical plugs and included bulk density, pulse decay permeability, effective porosity, and pore volume measurements. (Some cores were further tested approximately three months later by drilling horizontal plugs followed by bulk density and pulse decay permeability measurements.)

Table 1 Summary of DGR-2 Core Samples Submitted for Petrophysical Testing

<i>Intera Sample Identifier</i>	<i>CoreLab Sample No.</i>	<i>Formation</i>	<i>Sample Description</i>
DGR2-457.66	1	Queenston	Red shale
DGR2-488.51	2	Queenston	Grey and red shale
DGR2-515.01	3	Queenston	Red shale and grey siltstone layers
DGR2-540.00	4	Georgian Bay	Dark grey shale with grey siltstone
DGR2-556.33	5	Georgian Bay	Dark grey shale with interbedded limestone/siltstone
DGR2-576.09	6	Georgian Bay	Dark grey/green shale with thin siltstone layers
DGR2-596.09	7	Georgian Bay	Dark grey shale with thin siltstone layers
DGR2-613.93	8	Georgian Bay	Dark grey/green shale
DGR2-633.41	9	Blue Mountain	Dark grey to black massive shale
DGR2-650.12	10	Blue Mountain	Dark grey massive shale
DGR2-658.88	11	Cobourg (Collingwood Member)	Dark grey shale and argillaceous limestone
DGR2-669.10	12	Cobourg	Mottled argillaceous grey limestone and shale interbeds
DGR2-678.63	13	Cobourg	Mottled argillaceous grey limestone and shale interbeds
DGR2-687.10	14	Cobourg	Argillaceous grey limestone
DGR2-696.05	15	Sherman Fall	Argillaceous grey limestone and shale interbeds
DGR2-706.77	16	Sherman Fall	Mottled argillaceous grey limestone and shale interbeds
DGR2-744.86	17	Kirkfield	Mottled argillaceous grey limestone and shale interbeds
DGR2-795.04	18	Gull River	Argillaceous grey limestone and thin shale interbeds
DGR2-818.61	19	Gull River	Argillaceous grey limestone
DGR2-845.96	20	Cambrian	Tan to green/grey siltstone and sandstone

The Pulse Decay Permeameter (PDP-200™) was then used to measure the gas permeability of the core plugs, which were expected to have very low permeabilities. The range of permeability measurements with the PDP-200™ is from 5 nanodarcies (5E-21 m²) to 100 microdarcies (1E-16 m²). This very low permeability range makes it ideal for cap rock permeability, tight gas sands or shales, and other low permeability porous media. Flow rate is calculated from the known reservoir pressure, fluid compressibility and the rate of change of pressure from the upstream to the downstream ends of the core plug. When fluid flows from the upstream reservoir, its pressure declines with time. Conversely, when fluid flows into the downstream reservoir, the pressure increases with time. The pulse decay method uses an unsteady state technique to measure permeability to gas by use of very low differential pressure across the entire length of the sample, as described by Jones (1997).

Once all parameters had been measured on the “as-received” samples, they were submitted for Dean Stark analysis. This is a distillation method used to directly determine the water content of a sample and also to indirectly determine its oil and gas contents, expressed as ‘ saturations’, i.e. percentage of pore volume occupied by a particular fluid. Toluene is used as the solvent, and the distilled water removed from the sample is condensed into a calibrated trap where the volume is directly measured. Following Dean Stark analysis, toluene is used as a reflux solvent to remove oil. Any salts remaining in the sample are extracted by refluxing methanol. The sample is then dried (now “clean and dry” or “convection dry”) and the pore volume is measured. The water and oil volumes are reported with the basic properties measurements later in this report (see Tables 5 and 6).

Table 2 Core Lab Test Schedule Summary

CoreLab Sample Number	Depth, mBGS	Net Confining Stress, MPa	Bulk Density - "as received"	Pulse Decay Permeability - "as received"	Porosity - "as received"	Dean Stark residual fluids	Pulse Decay Permeability - clean and dry	Porosity - clean and dry	High Pressure Mercury Injection
1	457.66	7.76	X	X	X	X	X	X	X
2	488.51	8.27	X	X	X	X	X	X	X
2H	488.51	8.27	X	X		X	X	X	
3	515.01	8.62	X	X	X	X	X	X	X
4	540.00	9.14	X	X	X	X	X	X	X
5	556.33	9.48	X	X	X	X	X	X	X
6	576.09	9.82	X	X	X	X	X	X	X
7	596.09	10.17	X	X	X	X	X	X	X
7H	596.09	10.17	X	X		X	X	X	
8	613.93	10.34	X	X	X	X	X	X	X
9	633.41	10.68	X	X	X	X	X	X	X
10	650.12	11.03	X	X	X	X	X	X	X
11	658.88	11.20	X	X	X	X	X	X	X
12	669.10	11.38	X	X	X	X	X	X	X
12H	669.10	11.38	X	X		X	X	X	
13	678.63	11.55	X	X	X	X	X	X	X
13H	678.63	11.55	X	X		X	X	X	
14	687.10	11.72	X	X	X	X	X	X	X
14H	687.10	11.72	X	X		X	X	X	
15	696.05	11.89	X	X	X	X	X	X	X
16	706.77	12.07	X	X	X	X	X	X	
16H	706.77	12.07	X	X		X	X	X	
17	744.86	12.58	X	X	X	X	X	X	
18	795.04	13.44	X	X	X	X	X	X	
18H	795.04	13.44	X	X		X	X	X	
19	818.61	13.96	X	X	X	X	X	X	X
20	845.96	14.48	X	X	X	X	X	X	X

Basic rock properties tests were then performed on the “clean and dry” plugs, i.e., grain density, pulse decay permeability, total porosity, and pore volume measurements, followed by high pressure mercury intrusion testing.

For high pressure mercury injection analysis, samples were cut to provide trims small enough to fit within the glass penetrometers of the Micromeritics AutoPore mercury injection instrument. Ambient pore volumes and porosity were determined using helium-derived grain volumes (TP-07-03 Section 2.1.1.3) and toluene saturation (TP-07-03 Section 2.1.1.4) data as a check against the Micromeritics determined values. Permeability values reported were determined two ways: [1] ambient condition, surface Klinkenberg and permeability to air values were determined using a PDPK profile permeameter and [2] an empirical correlation permeability value was calculated from the mercury injection results using the method of Swanson (1981).

Apparent mercury injection volumes were corrected using a conformance factor determined for each sample from an evaluation of a plot of the apparent injection volume versus injection pressure. As an extremely non-wetting material, mercury must be forced with pressure to conform around and into surface features. The conformance value is the volume of mercury pressed into surface roughness and around sample edges after the penetrometer chamber is initially filled with mercury. This conformance volume is subtracted from all subsequent apparent injection volumes. Mercury injection data are presented in tabular and graphic form in Appendix A. The tabular data include: the injection pressure, mercury saturation, conversions of pressure to other laboratory systems, and estimated height above free water level of an oil-gas or gas-water contact assuming that the rock represents a petroleum reservoir. (N.B. The height above free water level calculations are provided by Core Lab for their petroleum engineering clients and are not specifically applicable to DGR.)

Pore throat size distribution was calculated from the mercury injection test results. These data are typically used for pore geometry characterizations and comparisons. The pore throat size distributions can often help to evaluate the results of other analyses performed on the same, or similar companion, samples. Textural effects and pore size distribution are major factors affecting irreducible water (i.e., brine) saturations.

In general, pore throat radii can be divided into several categories which can be used in the classification and grouping of the test samples. Microporosity is often defined as pore throat radii of less than 0.50 micrometers. The following classification is utilized for this discussion:

Classification Number	Pore Radius Classification	Pore Radius, μm	
		Minimum	Maximum
1	micro	<0.50	0.50
2	meso	0.50	2.5
3	macro	2.5	>10.

These ranges have been included on the pore throat radii histograms.

Additional tabular data include dimensionless Leverett J values and conversions of mercury injection pressures to those of approximately equivalent laboratory capillary pressures representing gas-water, gas-oil, and oil-water fluid systems. Leverett’s J function is a method of scaling or averaging capillary pressure phenomena as a function of a particular brine saturation (S_w) and is given by Lucia (1999) as:

$$J(S_w) = (P_c / \sigma \cos \theta) \sqrt{(k/\phi)}$$

where P_c is the capillary pressure, σ is the interfacial tension between the two fluids, $\cos \theta$ is the contact angle in degrees between wetting and non-wetting phases, k is the permeability and ϕ is the porosity. The square-root term is a function of pore size.

Values for interfacial tension (T) and the contact angle (theta, θ) between wetting and non-wetting phases used to compute fluid system capillary pressure are presented in Table 3. Leverett J values normalize the rock quality (permeability and porosity) and pressure-scaling (T and theta) terms. This allows the combination of results from different samples and pressure systems, converting all capillary pressure data to a universal curve that represents a specific formation or zone. Conversions of air-mercury pressures to other systems can be refined by applying actual measured values in place of the "typical" parameters which are used when measured values are not available.

The results of the petrophysical testing of DGR-2 core samples are summarized in Tables 4, 5 and 6 in Section 4 and in Appendix A.

3 Laboratory Test Procedures

3.1 Basic Analysis – As Received

1. Samples were drilled from the whole core with humidified nitrogen and trimmed as necessary to shape them into right cylinders.
2. Bulk density was measured on each sample (see TP-07-03, section 2.1.1.4).
3. Each sample was loaded into a hydrostatic core holder and the depth-specific net confining pressure (see Tables 5 and 6) for each sample was applied. The core holder assembly was attached to the Pulse Decay Permeameter (PDP-200™). The PDP-200 instrument uses an internal pore pressure of 1,000 psi or approximately 7,000 KPa. The 'net confining pressure' is equivalent to the vertical effective stress.
4. The upstream and downstream reservoirs and the sample pore volume are filled with gas to approximately 7000 kPa.
5. At equilibrium, pressure in the upstream reservoir is increased by about 1% of initial (about 70 kPa) causing a pressure pulse to flow through the sample. The pulse decay is monitored versus time.
6. Grain volume and direct pore volume were determined using Boyle's law of gas expansion with helium.
7. Porosity was calculated for each sample as the pore volume fraction of the summation (grain volume + pore volume) bulk volume.
8. Unsteady-state gas permeability was calculated based on pressure decay over time.
9. Following permeability and porosity testing, the samples were unloaded from the instrument and submitted for Dean Stark analysis to remove brine and oil from the pores.

3.2 Dean Stark Analysis

1. Extraction of residual fluids was done using a reflux soxhlet. Toluene was used to extract residual hydrocarbons.
2. The distilled water removed from the sample was condensed into a calibrated trap where the volume was read directly. The oil removed from the sample remained in solution in the solvent.
3. Following toluene reflux, any salts remaining in the sample were extracted by refluxing methanol. Silver nitrate solution was used to confirm that all salts had been removed from the core sample.

4. After Dean-Stark core analysis the samples were dried to a stable dry weight ($\pm 0.001\text{g}$) in a vacuum oven at a temperature of 104°C , and then were cooled to room temperature in a moisture-free environment. These are referred to in Tables 5 and 6 as “convection dry”, i.e., “clean and dry”.
5. After the sample was dried the pore volume was measured. The oil content was calculated by the difference of the water recovered from the total weight loss after extraction and drying. The water and oil volumes are reported as a percentage of the sample pore volume. In the calculations, the salinity of the porewater was assumed to be 200 g/kg brine and the specific gravity of oil was assumed to be 0.83.
6. These ‘clean and dry’ samples were then submitted for further pulse decay permeability testing.

3.3 Basic Analysis – Clean and Dry

1. Grain volume was determined for each sample by placing it into a stainless steel matrix cup. It was injected with helium from reference cells of known volume and pressure using the Core Lab Autoporosimeter. Grain volume (g/cm^3) was calculated using Boyle’s law of gas expansion. Grain density was calculated by dividing sample dry weight by grain volume.
2. Each sample was loaded into a hydrostatic core holder and the specified net confining pressure for each sample was applied. The core holder assembly was attached to the Pulse Decay Permeameter (PDP-200™).
3. The upstream and downstream reservoirs and the sample pore volume are filled with gas to approximately 7,000 kPa.
4. At equilibrium, pressure in the upstream reservoir is increased by about 1% of initial (about 70 kPa) causing a pressure pulse to flow through the sample. The pulse decay is monitored versus time.
5. A direct pore volume was determined using Boyle’s law of gas expansion with helium.
6. Porosity was calculated for each sample as the pore volume fraction of the summation (grain volume + pore volume) bulk volume.
7. Unsteady-state gas permeability was calculated based on pressure decay over time.

3.4 Basic Properties for Mercury Injection

1. Samples were cut to provide trims to fit within the penetrometer chambers of the Micromeritics AutoPore devices. These trims are the mercury injection test samples.
2. After drying in a vacuum oven, the samples were placed into a desiccator to prevent adsorption of moisture from the atmosphere as they cooled.
3. Dry weight was measured using an analytical balance ($\pm 0.001\text{g}$).
4. The UltraPorosimeter™ was used to obtain measured grain volume data. The system uses a sample chamber into which helium is allowed to expand as it is injected from reference cells of known volume and pressure. Grain volume was calculated using Boyle’s law of gas expansion. The dry weight was divided by the grain volume to calculate the grain density.
5. An ambient, mercury immersion bulk volume was determined. Pore volume was calculated as the difference between bulk volume and grain volume. The pore volume was divided by bulk volume to

calculate the porosity fraction.

6. The samples were placed into a stainless steel cylinder and evacuated overnight, then were pressure saturated with toluene, a strongly wetting fluid. Saturated pore volume data were obtained and compared to the (mercury bulk – grain volume) pore volumes. The saturated pore volumes are generally the preferred values used.
7. The samples were re-dried in a vacuum oven to fully remove the toluene.
8. Ambient, localized permeability (Klinkenberg and to air) was determined as possible using the PDPK probe permeameter. This was done only for samples that were not fragile and that had surfaces that were flat and regular enough for the probe tip to seal properly. Where possible, several measurements were taken and averaged.

3.5 High Pressure Mercury Injection

1. Testing was then performed using the Micromeritics Autopore 9320, an automated, high pressure mercury injection device which operates at injection pressures of 0 to 380 MPa.
2. Each test sample was weighed, and then loaded into a glass penetrometer consisting of a sample chamber attached to a capillary stem with a cylindrical coaxial capacitor. Each penetrometer used was selected on the basis of how well its capacity matched the sample pore volume to maximize accuracy and resolution.
3. The sample/penetrometer assembly was weighed, and then placed into the low pressure system.
4. The sample chamber was evacuated and filled with mercury, then the pressure was increased incrementally to slightly above atmospheric pressure. At the end of the low pressure phase the assembly was temporarily removed and re-weighed, then placed into the high pressure side of the apparatus.
5. Pressures were increased incrementally to a maximum of 380 MPa.
6. Time was allowed at each incremental pressure for saturation equilibrium. The volume of mercury injected at each pressure was determined by the change in capacitance of the capillary stem.
7. The pressure was decreased to ambient and the sample unloaded. A final weight was recorded to calculate the residual mercury saturation.
8. Micromeritics data were imported to a spreadsheet and the mercury volumes calculated. A conformance (correction for surface roughness) value was selected, volume corrections made, and saturations calculated.
9. Pore throat size, fluid system pressure conversion, and height data were calculated using “typical” parameters which are reported at the end of this discussion.

3.6 Other Calculations

1. Pore entry radii were calculated using the formula:

$$R_i = \frac{2T \cdot \cos \theta \cdot C}{P_c}$$

where: R_i = Pore entry radius, microns
 T = Interfacial tension, dynes/cm
 θ = Contact angle, degrees
 C = Unit conversion constant (to microns) = 0.145
 P_c = Mercury injection pressure, psia.

2. J-Function values are calculated from capillary pressure (or mercury injection) data and basic sample properties using the following equation:

$$\text{J-Function} = \frac{0.2166 \cdot P_c \cdot (k/\phi)^{1/2}}{(T \cdot \cos \theta)}$$

where: P_c = Injection pressure, psia
 T = Interfacial tension, dynes/cm
 θ = Contact angle, degrees
 k = Permeability to air (or Klinkenberg), millidarcies
 ϕ = Porosity, fraction.
 0.2166 = Factor used to cancel units and make "J" dimensionless

3. Conversions of pressure from one fluid system to the others are calculated using the example formula:

$$P_{c(g-w)} = P_{c(\text{meas.})} \cdot \frac{(T \cdot \cos \theta)_{(g-w)}}{(T \cdot \cos \theta)_{(\text{meas.})}}$$

where: $P_{c(g-w)}$ = Capillary pressure in a gas-water system, psia
 $P_{c(\text{meas.})}$ = Capillary pressure of the measured fluid system, psia
 T = Interfacial tension, dynes/cm
 θ = Contact angle, degrees

4. Height above free water¹ is calculated from laboratory capillary pressure data using the following equation:

$$P_{c_R} = P_{c_L} \cdot (T \cos \theta)_R / (T \cos \theta)_L$$

$$\text{Height} = P_{c_R} / (\rho_w - \rho_h)$$

where: P_{c_L} = Laboratory measured capillary pressure, psia
 $T \cos \theta_R$ = Interfacial tension * cosine of contact angle (reservoir), dynes/cm
 $T \cos \theta_L$ = Interfacial tension * cosine of contact angle (laboratory), dynes/cm
 ρ_w = Reservoir density gradient, water, psi/ft
 ρ_h = Reservoir density gradient, hydrocarbon, psi/ft
 T = Interfacial tension, dynes/cm
 θ = Contact angle, degrees

¹ These calculations are provided by Core Lab for their petroleum engineering clients and may not be applicable to DGR

Table 3 Summary of Calculation Parameters

Fluid System	(θ) Contact	Cosine θ	(T) Interfacial	T cosine θ
	Angle (degrees)		Tension (dynes/cm)	
Laboratory				
Gas-water	0.0	1.00	72.0	72.0
Oil-water	30.0	0.866	35.0	30.3
Gas-oil	0.0	1.00	24.0	24.0
Air-mercury	140.	0.765	485.	372.
Reservoir²				
Oil-water	30.0	0.866	25.0	21.7
Gas-water	0.0	1.00	50.0	50.0

Density Gradients

water	=	0.433 psi/ft (9.80 kPa/m)
oil	=	0.346 psi/ft (7.83 kPa/m)
gas	=	0.100 psi/ft (2.26 kPa/m)

4 Results of Laboratory Testing

Table 4 lists the sample properties and results of the mercury injection testing. Tables 5 and 6 list the bulk density, permeability, porosity and fluid saturation testing on vertical and horizontal core plugs, respectively. Vertical and horizontal properties are measured on vertical and horizontal core plugs, respectively. Permeability data in Tables 4, 5 and 6 are listed in units of m², converted from units of millidarcies in the original Core Laboratories test report. Similarly, pressures listed in Tables 2, 4, 5 and 6 are listed in units of MPa, converted from units of psia in the original Core Laboratories test report.

Twenty vertically-oriented and seven horizontally-oriented core plugs from DGR-2 cores were analyzed for petrophysical properties. In the Ordovician rocks from 450 to 800 m depths, the measured porosities on conditioned samples were in the range of <1% to 7%. Permeabilities measured on vertically and horizontally-oriented “as received” core plugs were in the range 1.2E-16 m² in the Queenston Formation to 4.9E-21 m² in the Georgian Bay Formation, which were generally lower than values measured on conditioned cores (range of 8.8E-16 m² in the Blue Mountain Formation to 6.6E-20 m² in the Cobourg Formation).

Porosity values for the Cobourg Formation were measured at 0.3 to 1.3% for conditioned cores. Permeability values for the Cobourg Formation were measured by gas pulse testing at 4.2E-18 to 2.9E-20 m² for “as received” cores and 2.0E-17 to 6.6E-20 m² for conditioned cores. Estimated permeabilities calculated using the Swanson method for the Cobourg Formation were lower and more uniform than gas pulse permeabilities, ranging from 9.9E-21 to 9.1E-21 m².

Comparison of vertical and horizontal formation permeabilities as measured with gas pulse testing, shows no consistent anisotropy. Some horizontal permeabilities are higher than vertical permeabilities and vice versa. This suggests that heterogeneity in formation permeability on the scale of the core plugs (i.e., 3 to 5 cm) imparts a greater variability than anisotropy.

² Reservoir Interfacial Tension (T) values can vary widely but are typically between 20 and 35 dynes/cm (SI equivalent) in an oil/water system. Reservoir oil/water theta values are highly variable, with strongly water-wet being an angle of 0° and strongly oil wet being an angle of 120°. Listed reservoir gas/water values are fairly typical to a depth of approximately 5000 feet. T will decrease with increasing depth (increasing temperature and pressure).

Table 4 Sample Properties and Mercury Injection Test Results

<i>Sample Number</i>	<i>Depth, mBGS</i>	<i>Swanson Permeability, m²</i>	<i>Porosity, Fraction</i>	<i>Approximate Hg Threshold Pressure, MPa</i>	<i>Median Pore Throat Radius, μm</i>	<i>Approximate Gas – Brine Threshold Pressure, MPa</i>
1m	457.66	1.97 E-19	0.077	23.96	0.0057	4.64
2m	488.51	3.95 E-20	0.051	39.10	0.0038	7.57
3m	515.01	2.96 E-19	0.081	12.81	0.0069	2.48
4m	540.00	1.97 E-19	0.068	14.29	0.0073	2.77
5m	556.33	1.97 E-20	0.032	30.95	0.0055	6.00
6m	576.09	1.97 E-19	0.084	40.16	0.0041	7.78
7m	596.09	1.97 E-19	0.084	33.76	0.0043	6.54
8m	613.93	1.97 E-19	0.086	30.44	0.0041	5.90
9m	633.41	9.87 E-20	0.075	35.38	0.0032	6.86
10m	650.12	9.87 E-20	0.075	34.23	0.0024	6.63
11m	658.88	9.87 E-21	0.015	33.92	0.0027	6.57
12m	669.10	1.97 E-21	0.011	16.51	0.0026	3.20
13m	678.63	2.96 E-21	0.013	39.10	0.0029	7.58
14m	687.10	9.87 E-21	0.020	38.49	0.0038	7.46
15m	695.05	9.87 E-21	0.008	18.20	0.0062	3.53
19m	818.61	4.69 E-16	0.116	0.46	0.274	0.09
20m	845.96	1.61 E-15	0.108	0.08	0.269	0.015

Calculation of fluid saturations is based upon the assumption that the salinity of the porewater in the Ordovician shales and limestones averages 200 g/kg brine, which is a reasonable estimate based on DGR-2 core porewater testing reported by the University of Ottawa (Intera Engineering Ltd., 2010a) and the University of New Brunswick (Intera Engineering Ltd., 2010b). These porewater salinity estimates result in the absence of petroleum throughout the Paleozoic sequence.

Considering only the vertical core plugs shown in Table 5, rather than the horizontal core plugs analysed three months later that may have somewhat dried out (e.g., DGR2-669.10 and DGR2-795.04), the brine saturations, which are measured directly, average 85.6% with a standard deviation of 9.9%. The implied gas saturations therefore average ~15% and vary between 0% and ~30% (DGR2-515.01 and DGR2-658.88), see Table 6. According to information received from CoreLab, evaluation of many measurements by the Shell Research Lab, Rijswijk, The Netherlands, indicate that the accuracy of oil and brine saturations are within 5% of sample pore volume.

High pressure mercury intrusion testing showed that, with the exception of the samples from 800 m and deeper, all DGR-2 rocks appeared to have homogenous pore-throat sizes of the order of 2-7 nm. Approximate threshold entry pressures, i.e., the applied pressure required for mercury to begin penetration of the pores, in these same homogeneous rocks range from 13 to 40 MPa (Table 4). Equivalent gas-brine threshold pressures range from 2.5 to 7.8 MPa. Appendix A lists complete threshold pressure profiles for gas-brine and other pore fluid pairs (e.g., oil-brine or gas-oil) derived from the mercury injection data.

Table 5 Summary of Core Analyses Results – Vertical Plugs

Sample Number	Sample Depth, mBGS	Net Confining Pressure, MPa	As Received				Saturation		Convection Dry				Length cm	Diameter cm
			Bulk Density g/cc	PDP Permeability, m ²	Porosity fraction	Pore Volume cc	Oil	Water	Grain Density g/cc	PDP Permeability, m ²	Porosity fraction	Pore Volume cc		
							% Pore Volume							
1	457.66	7.76	2.667	2.04 E-17	0.008	0.195	0.0	79.4	2.783	2.97 E-16	0.065	1.713	5.253	2.544
2	488.51	8.27	2.690	8.42 E-18	0.004	0.046	0.0	84.3	2.757	3.47 E-17	0.032	0.426	2.658	2.535
3	515.01	8.62	2.667	1.20 E-16	0.007	0.079	0.0	67.6	2.799	4.67 E-16	0.069	0.885	2.568	2.549
4	540.00	9.14	2.701	2.96 E-18	0.007	0.142	0.0	85.9	2.703	9.64 E-18	0.009	0.192	4.180	2.540
5	556.33	9.48	2.663	1.20 E-17	0.010	0.122	0.0	86.1	2.711	5.28 E-16	0.030	0.392	2.625	2.530
6	576.09	9.82	2.647	1.39 E-18	0.008	0.055	0.0	89.1	2.786	1.53 E-17	0.018	0.121	1.420	2.547
7	596.09	10.17	2.654	3.54 E-18	0.001	0.010	0.0	93.3	2.784	1.65 E-16	0.063	1.050	3.370	2.544
8	613.93	10.34	2.644	1.02 E-16	0.006	0.056	0.0	70.5	2.767	6.08 E-16	0.070	0.648	1.850	2.500
9	633.41	10.68	2.658	7.68 E-19	0.002	0.031	0.0	92.1	2.762	8.13 E-19	0.057	0.827	2.893	2.545
10	650.12	11.03	2.655	1.07 E-16	0.005	0.040	0.0	97.5	2.750	8.77 E-16	0.054	0.502	1.880	2.544
11	658.88	11.20	2.670	4.20 E-18	0.003	0.024	0.0	68.6	2.674	1.98 E-17	0.013	0.111	1.745	2.515
12	669.10	11.38	2.690	5.50 E-20	0.001	0.019	0.0	97.2	2.701	6.61 E-20	0.007	0.168	5.011	2.511
13	678.63	11.55	2.692	9.47 E-20	0.001	0.018	0.0	100.0	2.698	1.40 E-19	0.003	0.090	5.430	2.515
14	687.10	11.72	2.699	7.12 E-19	0.003	0.089	0.0	91.8	2.713	1.87 E-18	0.011	0.307	5.480	2.100
15	696.05	11.89	2.751	2.07 E-20	0.004	0.107	0.0	76.7	2.765	2.28 E-18	0.011	0.262	4.987	2.537
16	706.77	12.07	2.767	9.97 E-20	0.007	0.109	0.0	85.5	2.706	6.47 E-19	0.013	0.191	3.081	2.541
17	744.86	12.58	2.744	6.90 E-21	0.006	0.074	0.0	76.1	2.683	4.35 E-19	0.012	0.143	2.424	2.537
18	795.04	13.44	2.776	1.80 E-19	0.005	0.135	0.0	81.4	2.708	3.34 E-19	0.007	0.195	5.578	2.516
19	818.61	13.46	2.848	5.30 E-17	0.005	0.113	0.0	90.7	2.806	1.60 E-16	0.016	0.360	4.539	2.533
20	845.96	14.48	2.677	1.12 E-16	0.006	0.075	0.0	97.5	2.667	1.24 E-16	0.043	0.558	2.628	2.518

* A minimum mean pressure of 6.89 MPa was used to minimize gas slippage.

Table 6 Summary of Core Analyses Results – Horizontal Plugs

Sample Number	Sample Depth, mBGS	Net Confining Pressure, MPa	As Received				Saturation		Convection Dry				Length cm	Diameter cm
			Bulk Density, g/cc	PDP Permeability, m ²	Porosity, fraction	Pore Volume, cc	Oil	Water	Grain Density, g/cc	PDP Permeability, m ²	Porosity, fraction	Pore Volume, cc		
							% Pore Volume							
2H	488.51	8.27	2.676	4.80 E-18	0.056	0.760	0.0	100.0	2.769	7.06 E-17	0.066	0.965	2.700	2.540
7H	596.09	10.17	2.655	4.90 E-21	0.082	0.614	0.0	97.5	2.771	3.94 E-19	0.061	0.514	1.536	2.551
12H	669.10	11.38	2.699	3.94 E-19	0.008	0.178	0.0	48.9	2.703	3.42 E-18	0.017	0.370	4.412	2.511
13H	678.63	11.55	2.706	2.86 E-20	0.005	0.052	0.0	100.0	2.719	3.55 E-19	0.015	0.152	2.002	2.512
14H	687.10	11.72	2.702	1.96 E-19	0.014	0.276	0.0	84.8	2.716	6.23 E-18	0.023	0.462	3.873	2.515
16H	706.77	12.07	2.700	2.17 E-20	0.019	0.312	0.0	82.0	2.718	5.82 E-18	0.028	0.496	3.417	2.515
18H	795.04	13.44	2.713	2.66 E-20	0.029	0.232	0.0	61.0	2.716	2.32 E-19	0.046	0.411	1.693	2.518

5 Data Quality and Use

The reader is cautioned that the cores received at Core Lab will have undergone stress relaxation and thus certain parameters will have changed relative to their in-situ values, despite the re-application of confining pressures for these laboratory petrophysical tests. For example, the fractional change in pore volume per unit change in applied stress after the core is recovered from the borehole will cause irreversible pore-volume expansion and the possibility of an increase in measured permeability. Jones and Owens (1979) indicate that, at typical pore volume compressibility of $\sim 9 \times 10^{-4} \text{ MPa}^{-1}$, core relaxation would cause the porosity of sandstones to increase by a factor of 1.05 to 1.10.

The horizontally-cored plugs, whose results are shown in Table 6, were analysed approximately three months after the vertically-cored plugs were tested (i.e., Table 5 values). It appears that some of the core plugs in this later testing – e.g., DGR2-669.10 – had dried out during storage. Therefore some of the as-received permeability and brine saturation values shown in Table 6 may be unreliable.

Fluid saturations were estimated on the basis of an assumed pore-water salinity of 200 g/kg brine. While this is a reasonable approximation based on available DGR-2 pore water testing, it results in the predicted absence of oil (zero oil saturation) from certain zones in which oil and/or bitumen are suspected to be present. This approximation and others used to determine fluid saturations are considered further in TR-08-34 (Intera Engineering Ltd., 2010c).

The amount of core relaxation and porosity/permeability enhancement is expected to be greatest for those soft shale units (e.g., Queenston, Georgian Bay and Blue Mountain Formation shales) that showed significant core discing during core recovery, and minimal for those competent limestone units (e.g., Cobourg Formation limestone).

Porosity measurements were made on both “as received” and “convection dry” cores using the Boyles gas law expansion method using helium. Given that “as received” cores contained brine and some residual hydrocarbon in the rock pore space, porosities measured on cleaned “convection dry” cores are likely to be more representative of in-situ water-loss porosities for geochemical and hydrogeological assessment purposes than those measured on “as received” cores.

Core permeabilities were also measured on both “as received” and “convection dry” (i.e., “clean & dry”) cores using the gas pulse permeability method and were also estimated from mercury injection porosimetry testing (i.e., Swanson permeability). However, Swanson permeabilities may be unreliable given the shape of the capillary pressure curves obtained by Core Labs, which are much different than those used by Swanson (1981) to develop his correlation between mercury injection capillary pressure curves and permeability.

Both sets of gas pulse tests (“as received” and “convection dry”) provide estimates of permeability and both are essential data for the DGR descriptive geosphere site model. Permeability data generated from testing of “as received” core may underestimate the intrinsic permeability due to multi-phase (e.g., brine, oil and gas) effects; therefore each “as received” permeability value is actually one point on a relative permeability curve that is otherwise undefined. Permeability data generated from testing of cleaned “convection dry” core will provide an estimate of the intrinsic or absolute permeability due to the removal of (a) residual salts left behind by cleaning and drying (see TP-07-03, Section 2.1.1.4) and (b) hydrocarbons present in the pore volume. It is conceivable that such cleaning may dissolve some grain surfaces or pore-throat minerals and thus overestimate the permeability.

Therefore, the reader is urged to refer to the field hydraulic test results (e.g., TR-08-32, Intera Engineering Ltd., 2010d) for comparison; it is probable that the petrophysical permeabilities are more representative of disturbed samples than in-situ values because of microcrack formation during core relaxation and drying occurring

following coring and removal from the borehole. Such disturbed samples are often considered more representative of excavation damaged rock than of intact in-situ rock. In addition, pore volume expansion must cause a decrease in pore pressure that will allow the ex-solution of gases from any petroleum fluids trapped in the pore, thus the measured gas saturation is likely to be somewhat larger than that in-situ. This effect is expected to be greatest for those soft shale units (e.g., Georgian Bay and Blue Mountain Formation shales) that showed significant core dinking following core recovery, and minimal for those competent limestone units (e.g., Cobourg Formation limestone).

Thus, data presented in this Technical Report constitute a preliminary account of measured petrophysical parameters to guide others involved in the Deep Geologic Repository program. Overall, these results appear favourable to the DGR project given the low values of permeability and entry pressure measured by Core Lab, however further testing of petrophysical properties, including hydraulic pulse permeability testing with brine, is necessary to refine petrophysical parameter values for inclusion in the DGR descriptive geosphere site model.

6 Conclusions

Twenty vertically-oriented and seven horizontally-oriented core plugs from DGR-2 cores were analyzed for the petrophysical properties of the DGR Ordovician rocks cored between 450 to 800 m depth. "As received" cores reflect the effects of partial saturations (i.e., pore volume occupancies) by brine, oil and gas. "Clean & dry" core plugs reflect measurements following core conditioning at the laboratory. Thus porosity and permeability measurements on "as received" core plugs must be interpreted with care because they are dependent on variable fluid saturations and similar measurements on "clean and dry" core may reflect enhancements due to the conditioning process. However, all core is expected to have relaxed geomechanically following coring and therefore some pore volume expansion is likely to have occurred causing degassing of any oil present and enhancement of core permeability.

Conditioning of the core removed brine and any oil phases yielding fluid saturations and then the "clean & dry" core plugs were re-tested for porosity and permeability. The average (± 1 s.d.) brine saturation was 85.6% \pm 9.9%. Oil saturations (i.e., percentage of pore space occupied by oil) were determined to be 0% using an assumed porewater salinity of 200 g/kg brine. Thus the residual pore volume occupied by gas (i.e., the gas saturation) was about 0-30%.

Measured porosities on conditioned samples were in the range of <1% to 7% with the higher values occurring in the Upper Ordovician shales. Permeabilities measured on vertically and horizontally-oriented "as received" core plugs were in the range 1.2E-16 m² in the Queenston Formation to 4.9E-21 m² in the Georgian Bay Formation. Permeabilities measured on conditioned cores were in the range of 8.8E-16 m² in the Blue Mountain Formation to 6.6E-20 m² in the Cobourg Formation.

Porosity values for the Cobourg Formation were measured at 0.3 to 1.3% for conditioned cores. Permeability values for the Cobourg Formation were measured by gas pulse testing at 4.2E-18 to 2.9E-20 m² for "as received" cores and 2.0E-17 to 6.6E-20 m² for conditioned cores. The larger porosity and permeability values were from the Collingwood Member of the Cobourg Formation. Estimated permeabilities calculated using the Swanson method from mercury injection testing for the Cobourg Formation were lower and more uniform than gas pulse permeabilities, ranging from 9.9E-21 to 9.1E-21 m².

High pressure mercury intrusion testing showed that, with the exception of the samples from 800 m and deeper, all DGR-2 rocks appeared to have homogenous pore-throat sizes of the order of 2 to 7 nm and gas-brine threshold injection pressures of 2.5 to 7.8 MPa.

7 References

- Intera Engineering Ltd., 2010a. Technical Report: Pore Water and Gas Analyses in DGR-1 and DGR-2 Core, TR-07-21, Revision 1, May 20, Ottawa.
- Intera Engineering Ltd., 2010b. Technical Report: Measurement of Diffusion Properties by X-Ray Radiography and by Through-Diffusion Techniques Using Iodide and Tritium tracers: Core Samples from OS-1 and DGR-2, TR-07-17, Revision 3, May 19, Ottawa.
- Intera Engineering Ltd., 2010c. Technical Report: Fluid Saturation and Porosity Measurement of DGR Cores. TR-08-34, Revision 0, in preparation, Ottawa.
- Intera Engineering Ltd., 2010d. Technical Report: Analyses of Straddle Packer Tests in DGR Boreholes, TR-08-34, Revision 0, in preparation, Ottawa.
- Intera Engineering Ltd., 2009. Project Quality Plan, DGR Site Characterization, Revision 4, August 14, Ottawa.
- Intera Engineering Ltd., 2008. Phase 2 Geoscientific Site Characterization Plan, OPG's Deep Geologic Repository for Low and Intermediate Level Waste, Report INTERA 06-219.50-Phase 2 GSCP-R0, OPG 00216-REP-03902-00006-R00, April, Ottawa.
- Intera Engineering Ltd., 2007a. Test Plan for DGR-1 & DGR-2 Core Sampling and Distribution for Laboratory Testing, TP-06-10, Revision 4, May 14, Ottawa.
- Intera Engineering Ltd., 2007b. Test Plan for Laboratory Petrophysical Testing of DGR-2 Core, TP-07-03, Revision 1, May 28, Ottawa.
- Intera Engineering Ltd., 2006. Geoscientific Site Characterization Plan, OPG's Deep Geologic Repository for Low and Intermediate Level Waste, Report INTERA 05-220-1, OPG 00216-REP-03902-00002-R00, April, Ottawa.
- Jones, F.O and W.W. Owens, 1979. A Laboratory Study of Low Permeability Gas Sands. SPE 7551, Richardson, Texas.
- Jones, S.C., 1997. A Technique for Faster Pulse-Decay Permeability Measurements in Tight Rocks. SPE Formation Evaluation, March 1997.
- Lucia, F.J., 1999. Carbonate Reservoir Characterization. Springer, Berlin.
- Swanson, B.F., 1981. A Simple Correlation Between Permeabilities and Mercury Capillary Pressures, Journal of Petroleum Technology, SPE, December, pp. 2498-2504.

APPENDIX A

Mercury Injection Data Summaries

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	1m	un-	Host Plug	
Depth, meters:	457.66	stressed	1125psi	na
Klinkenberg Permeability, md:		0.177	0.296	-
Permeability to Air, md:		0.294	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.077	0.065	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0057		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.12	0.000	1.000	96.2	0.000987	0.217	0.0723	0.0914	0.453	0.900
2.11	0.000	1.000	51.1	0.00186	0.409	0.136	0.172	0.853	1.69
2.37	0.000	1.000	45.5	0.00209	0.459	0.153	0.193	0.957	1.90
2.67	0.000	1.000	40.4	0.00235	0.517	0.172	0.218	1.08	2.15
2.99	0.000	1.000	36.0	0.00263	0.579	0.193	0.244	1.21	2.40
3.37	0.000	1.000	32.0	0.00297	0.653	0.218	0.275	1.36	2.71
3.80	0.000	1.000	28.4	0.00335	0.736	0.245	0.310	1.53	3.05
4.29	0.000	1.000	25.1	0.00378	0.831	0.277	0.350	1.73	3.45
4.83	0.000	1.000	22.3	0.00426	0.936	0.312	0.394	1.95	3.88
5.45	0.000	1.000	19.8	0.00480	1.06	0.352	0.445	2.21	4.38
6.15	0.000	1.000	17.5	0.00542	1.19	0.397	0.502	2.48	4.95
6.94	0.000	1.000	15.5	0.00612	1.34	0.448	0.566	2.79	5.58
7.81	0.000	1.000	13.8	0.00688	1.51	0.505	0.637	3.15	6.28
8.83	0.000	1.000	12.2	0.00778	1.71	0.570	0.720	3.57	7.09
9.98	0.000	1.000	10.8	0.00879	1.93	0.645	0.814	4.02	8.02
11.3	0.000	1.000	9.56	0.00993	2.18	0.728	0.919	4.55	9.05
12.7	0.000	1.000	8.46	0.0112	2.47	0.823	1.04	5.15	10.2
14.4	0.000	1.000	7.49	0.0127	2.79	0.929	1.17	5.82	11.5
16.3	0.000	1.000	6.62	0.0143	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.87	0.0162	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.0183	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.59	0.0207	4.55	1.52	1.91	9.49	18.8
26.5	0.000	1.000	4.06	0.0234	5.14	1.71	2.16	10.7	21.3
30.1	0.000	1.000	3.58	0.0265	5.83	1.94	2.46	12.2	24.2
34.3	0.000	1.000	3.14	0.0303	6.65	2.22	2.80	13.9	27.6
38.9	0.000	1.000	2.77	0.0343	7.53	2.51	3.17	15.7	31.2
43.6	0.000	1.000	2.47	0.0384	8.45	2.82	3.56	17.6	35.1
49.3	0.000	1.000	2.19	0.0434	9.55	3.18	4.02	19.9	39.6
55.7	0.000	1.000	1.93	0.0491	10.8	3.60	4.55	22.5	44.8
63.1	0.000	1.000	1.71	0.0556	12.2	4.08	5.15	25.4	50.7
71.6	0.000	1.000	1.51	0.0630	13.9	4.62	5.84	29.0	57.5
80.4	0.000	1.000	1.34	0.0708	15.6	5.19	6.56	32.5	64.6
90.8	0.000	1.000	1.19	0.0800	17.6	5.86	7.41	36.7	73.0
103	0.000	1.000	1.05	0.0906	19.9	6.64	8.39	41.5	82.7

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	1m	un-	Host Plug	
Depth, meters:	457.66	stressed	1125psi	na
Klinkenberg Permeability, md:		0.177	0.296	-
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Swanson Permeability, md:		0.0002	-	-
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maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0057		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.928	0.102	22.5	7.50	9.48	46.9	93.4
132	0.000	1.000	0.818	0.116	25.5	8.51	10.7	53.2	105
149	0.000	1.000	0.723	0.131	28.9	9.63	12.2	60.3	120
169	0.000	1.000	0.638	0.149	32.7	10.9	13.8	68.2	136
192	0.000	1.000	0.563	0.169	37.1	12.4	15.6	77.4	154
215	0.000	1.000	0.502	0.189	41.6	13.9	17.5	86.8	172
244	0.000	1.000	0.442	0.215	47.2	15.7	19.9	98.4	196
280	0.000	1.000	0.385	0.247	54.2	18.1	22.8	113	225
312	0.000	1.000	0.346	0.275	60.4	20.1	25.4	126	250
352	0.000	1.000	0.306	0.310	68.1	22.7	28.7	142	283
398	0.000	1.000	0.270	0.351	77.2	25.7	32.5	161	320
454	0.000	1.000	0.237	0.400	87.9	29.3	37.0	183	365
515	0.000	1.000	0.209	0.454	99.9	33.3	42.1	208	415
579	0.000	1.000	0.186	0.511	112	37.4	47.3	234	466
657	0.000	1.000	0.164	0.579	127	42.4	53.6	265	528
735	0.000	1.000	0.147	0.647	142	47.5	59.9	296	590
836	0.000	1.000	0.129	0.737	162	54.0	68.2	338	672
946	0.000	1.000	0.114	0.833	183	61.1	77.2	382	761
1100	0.000	1.000	0.0981	0.968	213	71.0	89.6	444	883
1230	0.000	1.000	0.0876	1.08	238	79.4	100	496	985
1380	0.000	1.000	0.0783	1.21	267	88.9	112	557	1100
1570	0.000	1.000	0.0685	1.39	305	102	128	636	1260
1770	0.000	1.000	0.0608	1.56	344	115	145	717	1430
1990	0.000	1.000	0.0541	1.75	386	129	162	805	1600
2280	0.000	1.000	0.0473	2.01	441	147	186	920	1830
2550	0.000	1.000	0.0422	2.25	495	165	208	1030	2050
2880	0.000	1.000	0.0374	2.54	559	186	235	1170	2320
3240	0.000	1.000	0.0333	2.85	628	209	264	1310	2600
3670	0.002	0.998	0.0294	3.23	710	237	299	1480	2950
4210	0.003	0.997	0.0256	3.71	816	272	343	1700	3380
4690	0.005	0.995	0.0230	4.14	910	303	383	1900	3770
5300	0.007	0.993	0.0203	4.67	1030	342	432	2150	4260
5970	0.011	0.989	0.0181	5.26	1160	385	487	2420	4800
6760	0.014	0.986	0.0159	5.96	1310	437	552	2730	5440

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	1m	un-	Host Plug	
Depth, meters:	457.66	stressed	1125psi	na
Klinkenberg Permeability, md:		0.177	0.296	-
Permeability to Air, md:		0.294	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.077	0.065	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0057		

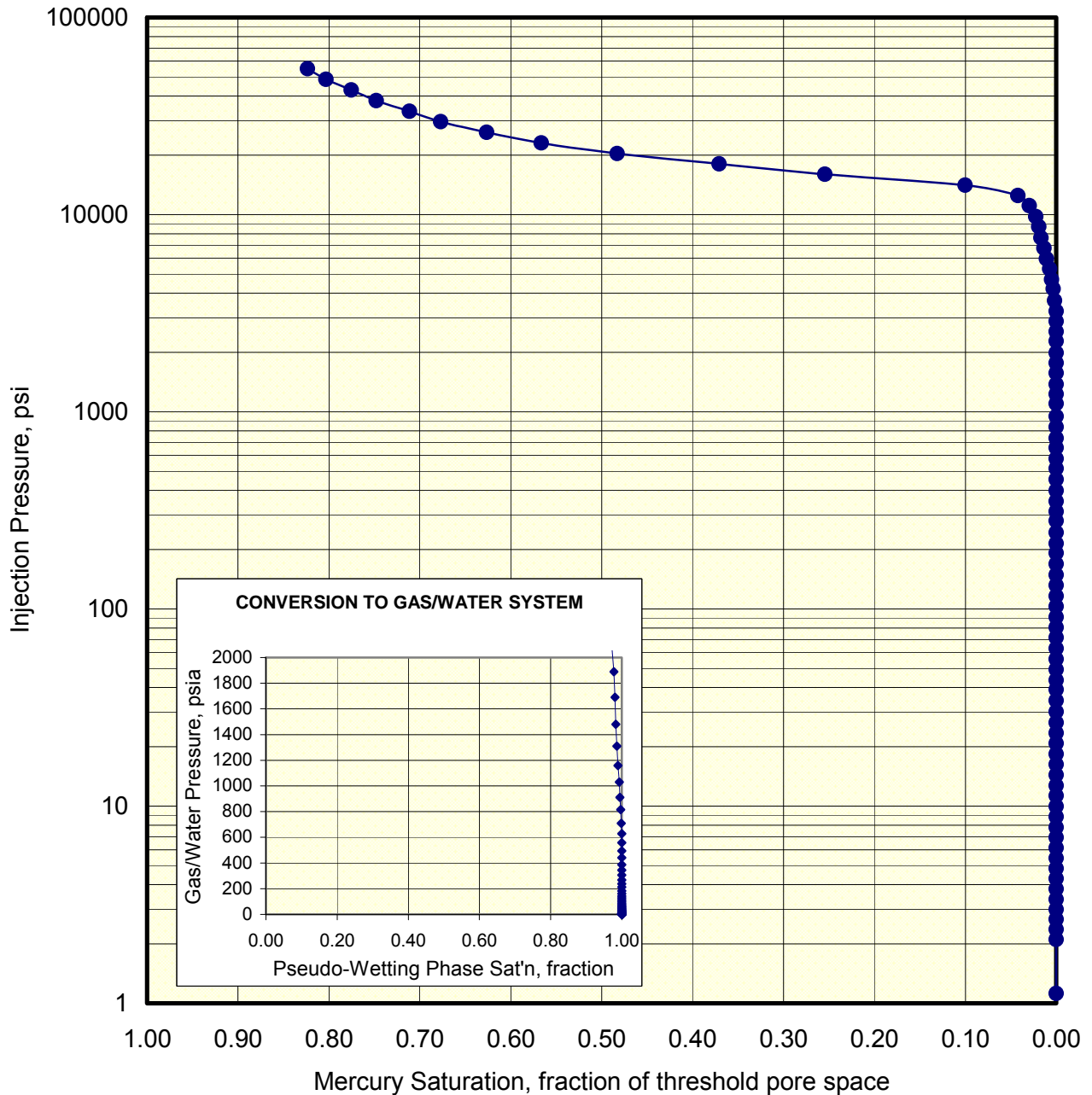
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.017	0.983	0.0141	6.73	1480	494	623	3090	6140
8700	0.019	0.981	0.0124	7.67	1690	562	710	3520	7000
9770	0.022	0.978	0.0110	8.61	1890	631	797	3940	7850
11100	0.030	0.970	0.00974	9.75	2140	715	903	4460	8900
12500	0.042	0.958	0.00863	11.0	2420	807	1020	5050	10000
14100	0.100	0.900	0.00762	12.5	2740	913	1150	5710	11300
16000	0.255	0.745	0.00674	14.1	3100	1030	1300	6460	12800
18100	0.371	0.629	0.00596	15.9	3510	1170	1480	7320	14600
20400	0.483	0.517	0.00527	18.0	3960	1320	1670	8260	16500
23100	0.566	0.434	0.00466	20.4	4490	1500	1890	9360	18600
26200	0.626	0.374	0.00412	23.0	5070	1690	2130	10600	21000
29600	0.677	0.323	0.00364	26.1	5740	1910	2410	12000	23700
33400	0.711	0.289	0.00322	29.5	6480	2160	2730	13500	26900
37900	0.748	0.252	0.00284	33.4	7350	2450	3090	15300	30400
42800	0.775	0.225	0.00252	37.7	8300	2770	3490	17300	34400
48500	0.803	0.197	0.00222	42.8	9410	3140	3960	19600	39000
54900	0.824	0.176	0.00196	48.4	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	1m	un-stressed	Host Plug	
Depth, meters:	457.66		1125psi	na
Klinkenberg Permeability, md:	0.177	0.296	-	-
Permeability to Air, md:	0.294	-	-	-
Swanson Permeability, md:	0.0002	-	-	-
Total Porosity, fraction:	0.077	0.065	-	-
maximum Sb/Pc, fraction:	0.0002			
R35, microns:	0.0065			
R50 (median pore throat radius):	0.0057			

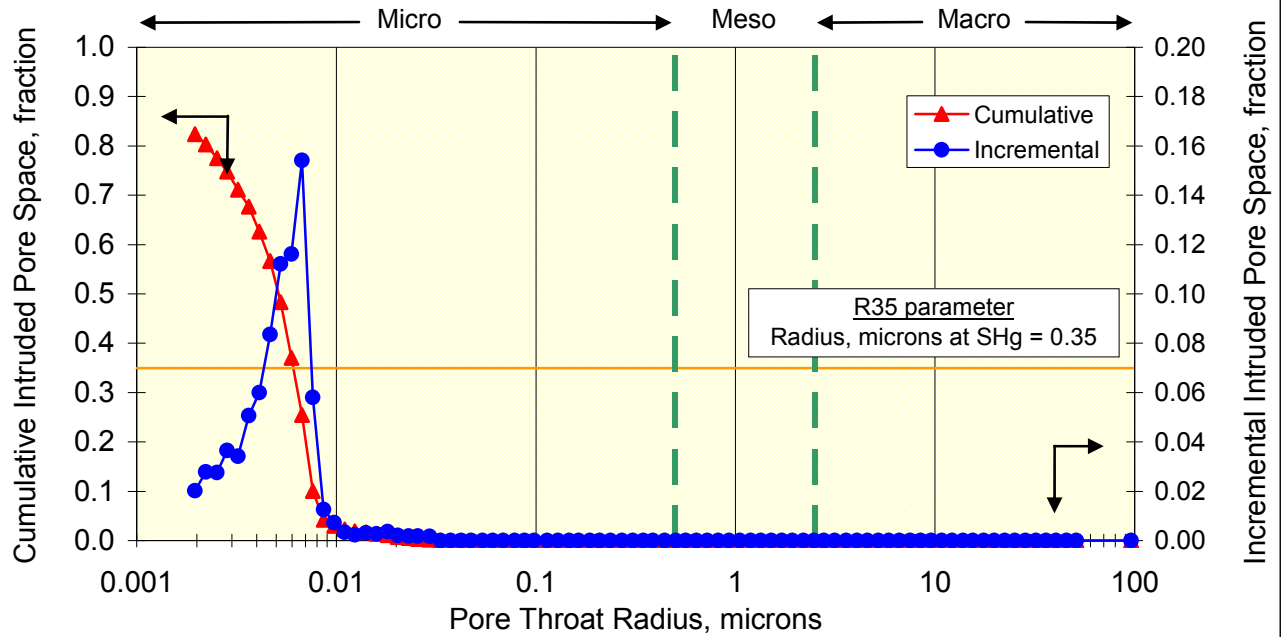
MERCURY INJECTION



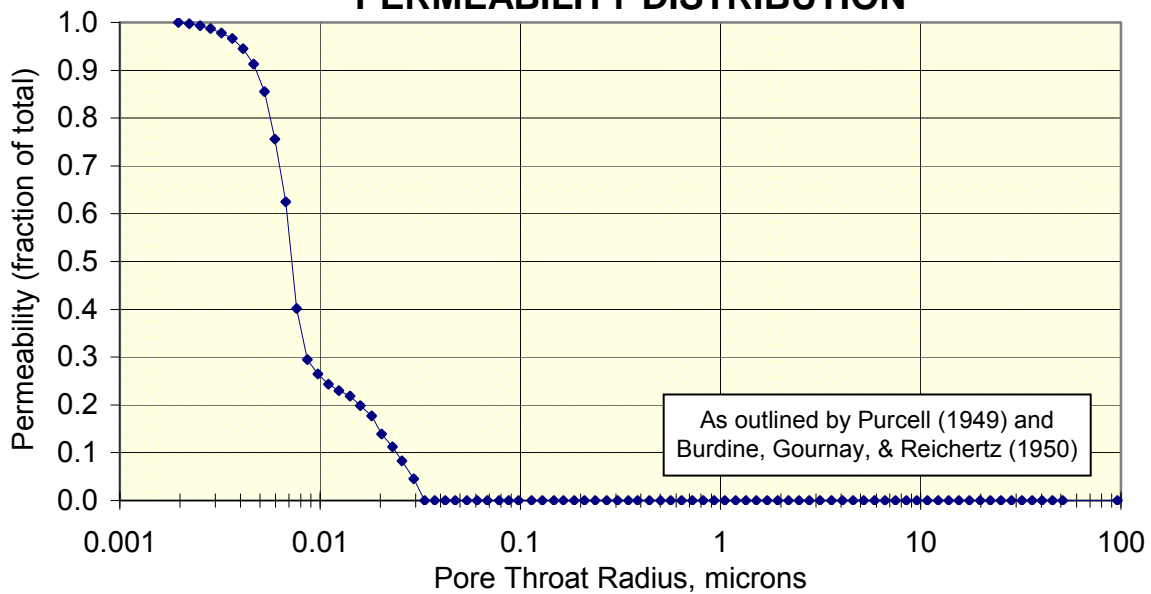
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	1m	un-	Host Plug	
Depth, meters:	457.66	stressed	1125psi	na
Klinkenberg Permeability, md:	0.177	0.296	-	-
Permeability to Air, md:	0.294	-	-	-
Swanson Permeability, md:	0.0002	-	-	-
Total Porosity, fraction:	0.077	0.065	-	-
maximum Sb/Pc, fraction:	0.0002			
R35, microns:	0.0065			
R50 (median pore throat radius):	0.0057			

PORE THROAT RADIUS DISTRIBUTION



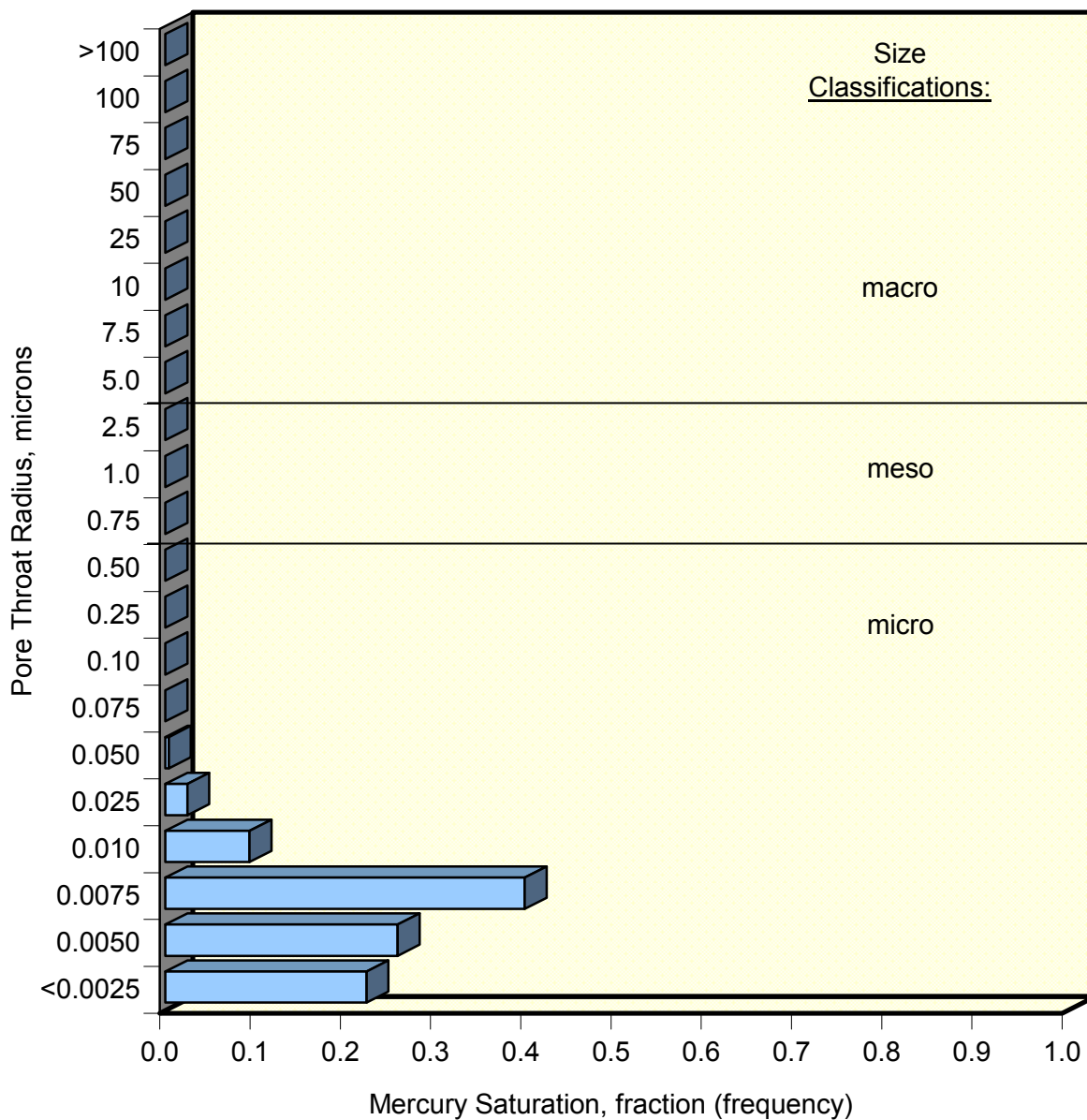
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	1m	un-	Host Plug
Depth, meters:	457.66	stressed	1125psi na
Klinkenberg Permeability, md:		0.177	0.296 -
Permeability to Air, md:		0.294	- -
Swanson Permeability, md:		0.0002	- -
Total Porosity, fraction:		0.077	0.065 -
maximum Sb/Pc, fraction:		0.0002	
R35, microns:		0.0065	
R50 (median pore throat radius):		0.0057	

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	2m	un-	Host Plug	
Depth, meters:	488.51	stressed	1200psi	na
Klinkenberg Permeability, md:		0.029	0.035	-
Permeability to Air, md:		0.066	-	-
Swanson Permeability, md:		0.00004	-	-
Total Porosity, fraction:		0.051	0.032	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0038		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.12	0.000	1.000	96.2	0.000494	0.217	0.0723	0.0914	0.453	0.900
2.11	0.000	1.000	51.1	0.000931	0.409	0.136	0.172	0.853	1.69
2.37	0.000	1.000	45.5	0.00105	0.459	0.153	0.193	0.957	1.90
2.67	0.000	1.000	40.4	0.00118	0.517	0.172	0.218	1.08	2.15
2.99	0.000	1.000	36.0	0.00132	0.579	0.193	0.244	1.21	2.40
3.37	0.000	1.000	32.0	0.00149	0.653	0.218	0.275	1.36	2.71
3.80	0.000	1.000	28.4	0.00168	0.736	0.245	0.310	1.53	3.05
4.29	0.000	1.000	25.1	0.00189	0.831	0.277	0.350	1.73	3.45
4.83	0.000	1.000	22.3	0.00213	0.936	0.312	0.394	1.95	3.88
5.45	0.000	1.000	19.8	0.00241	1.06	0.352	0.445	2.21	4.38
6.15	0.000	1.000	17.5	0.00271	1.19	0.397	0.502	2.48	4.95
6.94	0.000	1.000	15.5	0.00306	1.34	0.448	0.566	2.79	5.58
7.81	0.000	1.000	13.8	0.00345	1.51	0.505	0.637	3.15	6.28
8.83	0.000	1.000	12.2	0.00390	1.71	0.570	0.720	3.57	7.09
9.98	0.000	1.000	10.8	0.00441	1.93	0.645	0.814	4.02	8.02
11.3	0.000	1.000	9.56	0.00497	2.18	0.728	0.919	4.55	9.05
12.7	0.000	1.000	8.46	0.00562	2.47	0.823	1.04	5.15	10.2
14.4	0.000	1.000	7.49	0.00635	2.79	0.929	1.17	5.82	11.5
16.3	0.000	1.000	6.62	0.00718	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.87	0.00811	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.00917	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.59	0.0104	4.55	1.52	1.91	9.49	18.8
26.5	0.000	1.000	4.06	0.0117	5.14	1.71	2.16	10.7	21.3
30.1	0.000	1.000	3.58	0.0133	5.83	1.94	2.45	12.2	24.1
34.3	0.000	1.000	3.14	0.0151	6.65	2.22	2.8	13.9	27.6
38.8	0.000	1.000	2.77	0.0171	7.53	2.51	3.17	15.7	31.2
43.6	0.000	1.000	2.47	0.0192	8.44	2.81	3.55	17.6	35.0
49.3	0.000	1.000	2.19	0.0217	9.54	3.18	4.02	19.9	39.6
55.7	0.000	1.000	1.93	0.0246	10.8	3.60	4.54	22.5	44.7
63.1	0.000	1.000	1.71	0.0279	12.2	4.08	5.15	25.4	50.7
71.5	0.000	1.000	1.51	0.0316	13.9	4.62	5.83	29.0	57.4
80.3	0.000	1.000	1.34	0.0355	15.6	5.19	6.55	32.5	64.5
90.8	0.000	1.000	1.19	0.0401	17.6	5.86	7.40	36.7	72.9
103	0.000	1.000	1.05	0.0454	19.9	6.64	8.39	41.5	82.7

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	2m	un-	Host Plug	
Depth, meters:	488.51	stressed	1200psi	na
Klinkenberg Permeability, md:		0.029	0.035	-
Permeability to Air, md:		0.066	-	-
Swanson Permeability, md:		0.00004	-	-
Total Porosity, fraction:		0.051	0.032	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0038		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.928	0.0513	22.5	7.50	9.47	46.9	93.3
132	0.000	1.000	0.818	0.0581	25.5	8.50	10.7	53.2	105
149	0.000	1.000	0.723	0.0658	28.9	9.63	12.2	60.3	120
169	0.000	1.000	0.638	0.0745	32.7	10.9	13.8	68.2	136
192	0.000	1.000	0.563	0.0845	37.1	12.4	15.6	77.4	154
215	0.000	1.000	0.502	0.0948	41.6	13.9	17.5	86.8	172
244	0.000	1.000	0.442	0.108	47.2	15.7	19.9	98.4	196
280	0.000	1.000	0.385	0.123	54.2	18.1	22.8	113	225
312	0.000	1.000	0.346	0.138	60.4	20.1	25.4	126	250
352	0.000	1.000	0.306	0.155	68.1	22.7	28.7	142	283
398	0.000	1.000	0.270	0.176	77.2	25.7	32.5	161	320
454	0.000	1.000	0.237	0.200	87.9	29.3	37.0	183	365
515	0.000	1.000	0.209	0.228	99.9	33.3	42.0	208	414
579	0.000	1.000	0.186	0.256	112	37.4	47.3	234	466
657	0.000	1.000	0.164	0.290	127	42.4	53.6	265	528
735	0.000	1.000	0.147	0.324	142	47.5	59.9	296	590
836	0.000	1.000	0.129	0.369	162	54.0	68.2	338	672
946	0.000	1.000	0.114	0.417	183	61.1	77.1	382	760
1100	0.000	1.000	0.0981	0.485	213	71.0	89.6	444	883
1230	0.000	1.000	0.0877	0.543	238	79.4	100	496	985
1380	0.000	1.000	0.0783	0.607	267	88.9	112	557	1100
1570	0.000	1.000	0.0685	0.694	305	102	128	636	1260
1770	0.000	1.000	0.0608	0.783	344	115	145	717	1430
1990	0.000	1.000	0.0541	0.879	386	129	162	805	1600
2280	0.000	1.000	0.0473	1.01	441	147	186	920	1830
2550	0.000	1.000	0.0422	1.13	495	165	208	1030	2050
2880	0.000	1.000	0.0374	1.27	559	186	235	1170	2320
3240	0.000	1.000	0.0333	1.43	628	209	264	1310	2600
3670	0.000	1.000	0.0294	1.62	710	237	299	1480	2950
4210	0.000	1.000	0.0256	1.86	816	272	343	1700	3380
4690	0.000	1.000	0.0230	2.07	910	303	383	1900	3770
5300	0.000	1.000	0.0203	2.34	1030	342	432	2150	4260
5970	0.004	0.996	0.0181	2.63	1160	385	487	2420	4800
6760	0.007	0.993	0.0159	2.98	1310	437	552	2730	5440

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	2m	un-	Host Plug	
Depth, meters:	488.51	stressed	1200psi	na
Klinkenberg Permeability, md:		0.029	0.035	-
Permeability to Air, md:		0.066	-	-
Swanson Permeability, md:		0.00004	-	-
Total Porosity, fraction:		0.051	0.032	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0038		

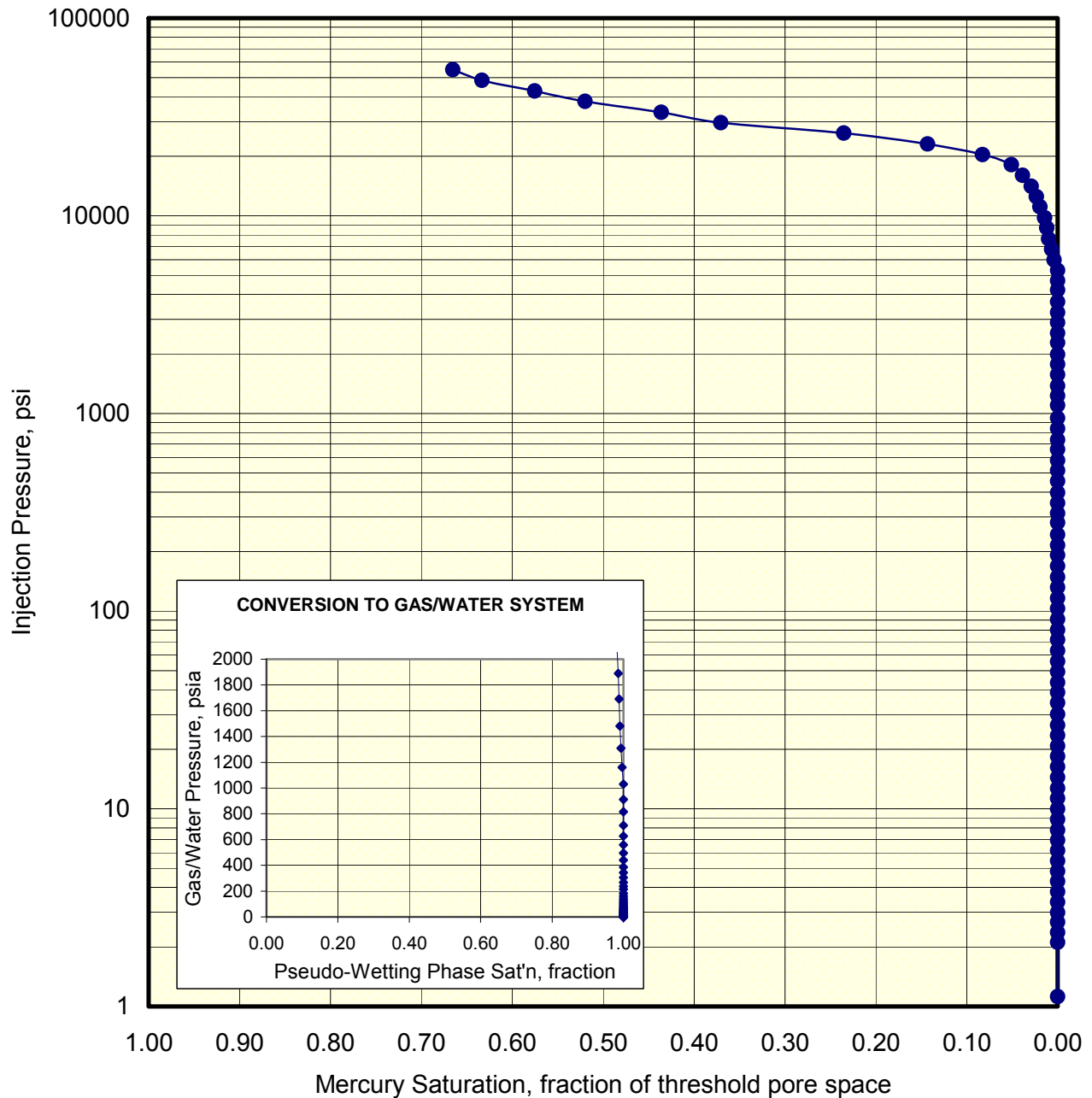
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.010	0.990	0.0141	3.37	1480	494	623	3090	6140
8700	0.012	0.988	0.0124	3.84	1690	562	710	3520	7000
9770	0.014	0.986	0.0110	4.31	1890	631	797	3940	7850
11100	0.019	0.981	0.00974	4.89	2140	715	903	4460	8900
12500	0.023	0.977	0.00863	5.51	2420	807	1020	5050	10000
14100	0.029	0.971	0.00762	6.24	2740	913	1150	5710	11300
16000	0.039	0.961	0.00674	7.06	3100	1030	1300	6460	12800
18100	0.051	0.949	0.00596	7.98	3510	1170	1480	7320	14600
20400	0.083	0.917	0.00527	9.03	3960	1320	1670	8260	16500
23100	0.143	0.857	0.00466	10.2	4490	1500	1890	9360	18600
26200	0.235	0.765	0.00412	11.5	5070	1690	2130	10600	21000
29600	0.371	0.629	0.00364	13.1	5740	1910	2410	12000	23700
33400	0.436	0.564	0.00322	14.8	6480	2160	2730	13500	26900
37900	0.520	0.480	0.00284	16.7	7350	2450	3090	15300	30400
42800	0.575	0.425	0.00252	18.9	8300	2770	3490	17300	34400
48500	0.633	0.367	0.00222	21.4	9410	3140	3960	19600	39000
54900	0.665	0.335	0.00196	24.3	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	2m	un-stressed	Host Plug	
Depth, meters:	488.51		1200psi	na
Klinkenberg Permeability, md:		0.029	0.035	-
Permeability to Air, md:		0.066	-	-
Swanson Permeability, md:		0.00004	-	-
Total Porosity, fraction:		0.051	0.032	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0038		

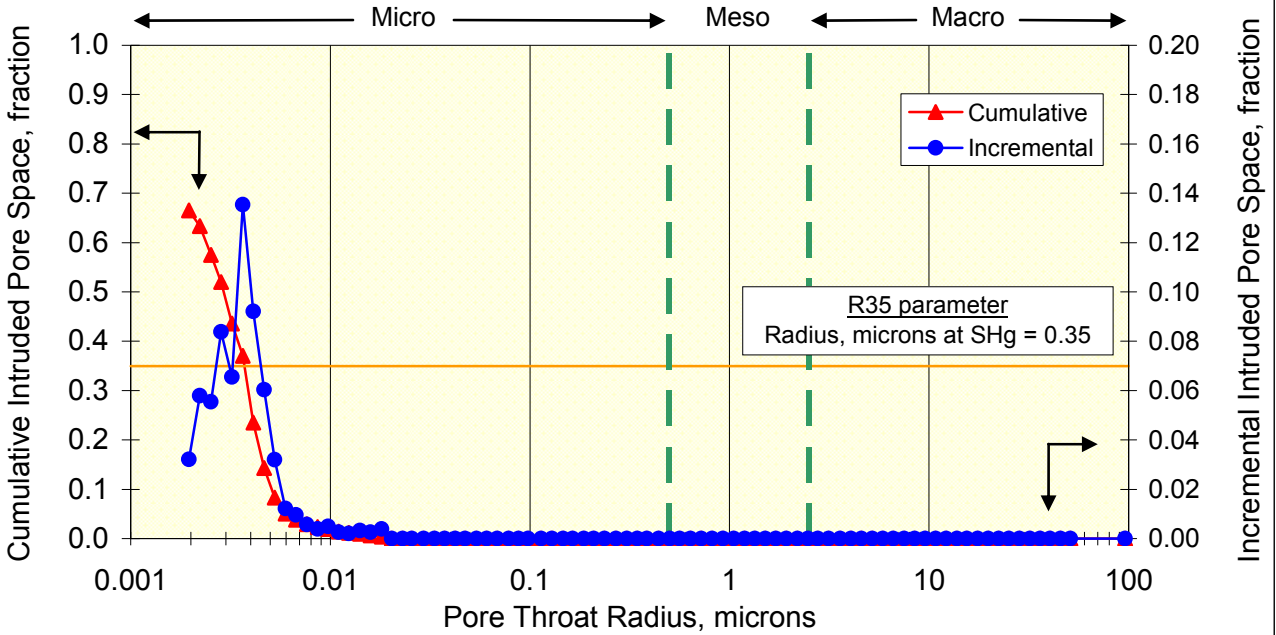
MERCURY INJECTION



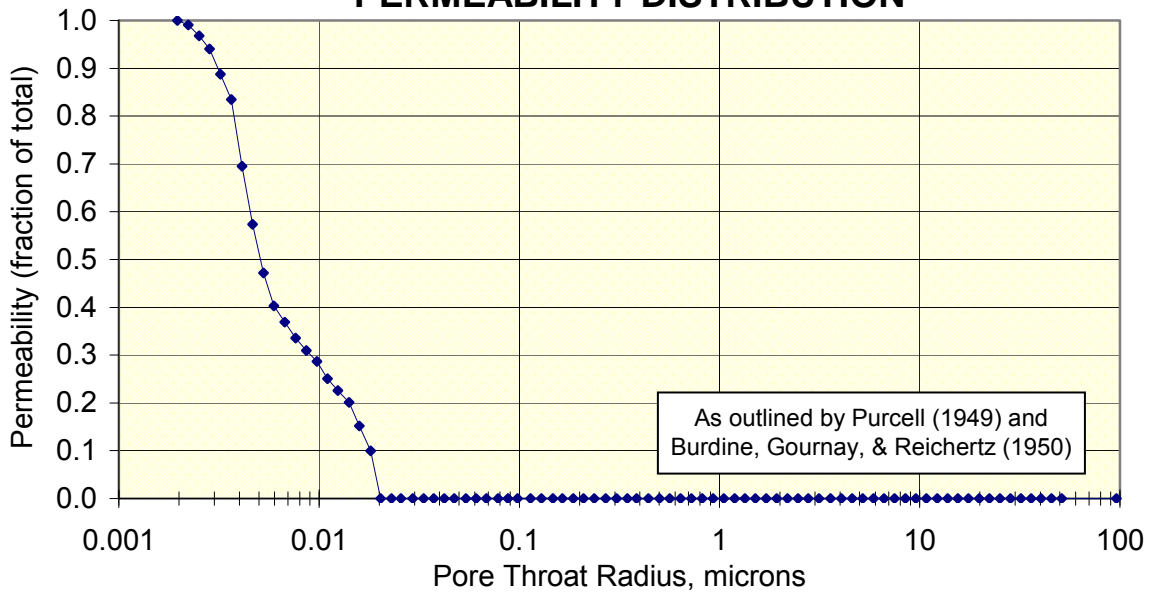
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	2m	un-	Host Plug	
Depth, meters:	488.51	stressed	1200psi	na
Klinkenberg Permeability, md:		0.029	0.035	-
Permeability to Air, md:		0.066	-	-
Swanson Permeability, md:		0.00004	-	-
Total Porosity, fraction:		0.051	0.032	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0038		

PORE THROAT RADIUS DISTRIBUTION



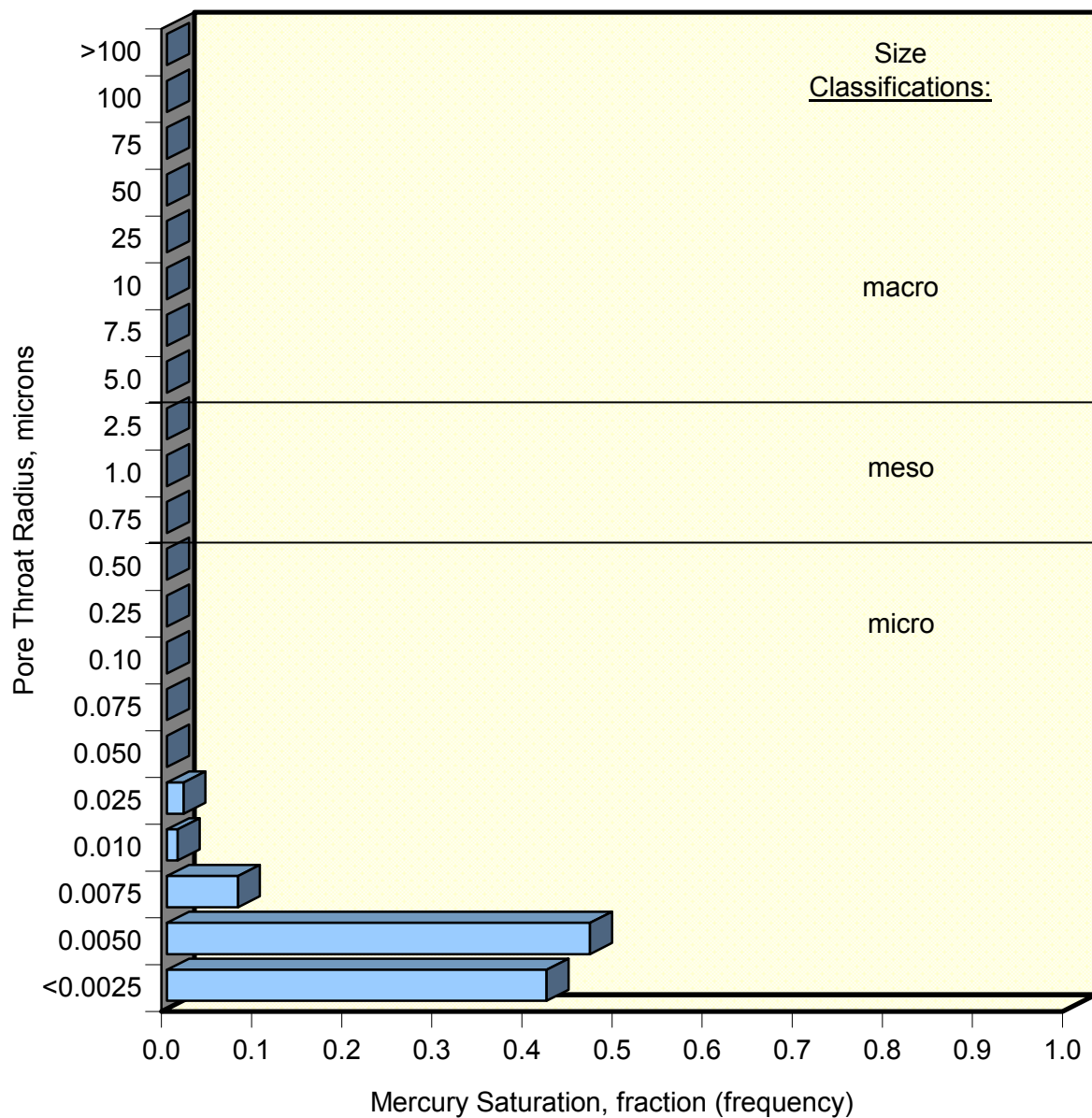
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	2m	un-	Host Plug	
Depth, meters:	488.51	stressed	1200psi	na
Klinkenberg Permeability, md:		0.029	0.035	-
Permeability to Air, md:		0.066	-	-
Swanson Permeability, md:		0.00004	-	-
Total Porosity, fraction:		0.051	0.032	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0038		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	3m	un-	Host Plug	
Depth, meters:	515.01	stressed	1250psi	na
Klinkenberg Permeability, md:		0.005	0.474	-
Permeability to Air, md:		0.018	-	-
Swanson Permeability, md:		0.0003	-	-
Total Porosity, fraction:		0.081	0.069	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0080		
R50 (median pore throat radius):		0.0069		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.22	0.000	1.000	88.3	0.000177	0.236	0.0788	0.0995	0.492	0.980
2.18	0.000	1.000	49.4	0.000315	0.422	0.141	0.178	0.88	1.75
2.45	0.000	1.000	44.0	0.000355	0.475	0.158	0.200	0.991	1.97
2.72	0.000	1.000	39.6	0.000394	0.527	0.176	0.222	1.10	2.19
3.08	0.000	1.000	35.0	0.000446	0.597	0.199	0.251	1.24	2.47
3.46	0.000	1.000	31.1	0.000501	0.671	0.224	0.282	1.40	2.78
3.89	0.000	1.000	27.7	0.000563	0.754	0.251	0.317	1.57	3.12
4.36	0.000	1.000	24.7	0.000631	0.845	0.282	0.356	1.76	3.51
4.91	0.000	1.000	21.9	0.000711	0.952	0.317	0.401	1.99	3.95
5.53	0.000	1.000	19.5	0.000800	1.07	0.357	0.451	2.23	4.44
6.23	0.000	1.000	17.3	0.000902	1.21	0.402	0.508	2.52	5.00
7.01	0.000	1.000	15.4	0.00101	1.36	0.453	0.572	2.84	5.64
7.91	0.000	1.000	13.6	0.00114	1.53	0.511	0.645	3.19	6.35
8.90	0.000	1.000	12.1	0.00129	1.72	0.575	0.726	3.59	7.15
10.0	0.000	1.000	10.7	0.00145	1.94	0.648	0.818	4.05	8.06
11.3	0.000	1.000	9.51	0.00164	2.20	0.732	0.924	4.59	9.10
12.8	0.000	1.000	8.42	0.00185	2.48	0.826	1.04	5.17	10.2
14.5	0.000	1.000	7.45	0.00209	2.80	0.934	1.18	5.84	11.6
16.3	0.000	1.000	6.61	0.00236	3.16	1.05	1.33	6.59	13.1
18.4	0.000	1.000	5.84	0.00267	3.57	1.19	1.50	7.44	14.8
20.8	0.000	1.000	5.18	0.00301	4.03	1.34	1.70	8.40	16.7
23.5	0.000	1.000	4.58	0.00341	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.00385	5.16	1.72	2.17	10.8	21.4
30.5	0.000	1.000	3.53	0.00442	5.92	1.97	2.49	12.3	24.5
34.0	0.000	1.000	3.17	0.00493	6.60	2.2	2.78	13.8	27.4
38.3	0.000	1.000	2.82	0.00554	7.41	2.47	3.12	15.5	30.7
43.9	0.000	1.000	2.45	0.00636	8.51	2.84	3.58	17.7	35.3
49.4	0.000	1.000	2.18	0.00715	9.57	3.19	4.03	20.0	39.7
55.4	0.000	1.000	1.95	0.00802	10.7	3.58	4.52	22.3	44.5
63.4	0.000	1.000	1.70	0.00918	12.3	4.10	5.17	25.7	50.9
71.0	0.000	1.000	1.52	0.0103	13.8	4.59	5.79	28.8	57.0
80.7	0.000	1.000	1.33	0.0117	15.6	5.22	6.59	32.5	64.9
91.7	0.000	1.000	1.17	0.0133	17.8	5.92	7.48	37.1	73.7
104	0.000	1.000	1.04	0.0150	20.1	6.70	8.46	41.9	83.3

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	3m	un-	Host Plug	
Depth, meters:	515.01	stressed	1250psi	na
Klinkenberg Permeability, md:		0.005	0.474	-
Permeability to Air, md:		0.018	-	-
Swanson Permeability, md:		0.0003	-	-
Total Porosity, fraction:		0.081	0.069	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0080		
R50 (median pore throat radius):		0.0069		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.930	0.0168	22.4	7.48	9.45	46.7	93.1
132	0.000	1.000	0.819	0.0190	25.5	8.50	10.7	53.2	105
149	0.000	1.000	0.723	0.0216	28.9	9.62	12.2	60.3	120
168	0.000	1.000	0.640	0.0244	32.6	10.9	13.7	68.0	135
191	0.000	1.000	0.565	0.0276	37.0	12.3	15.6	77.2	154
215	0.000	1.000	0.502	0.0311	41.6	13.9	17.5	86.8	172
242	0.000	1.000	0.445	0.0350	46.9	15.6	19.7	97.8	194
276	0.000	1.000	0.391	0.0399	53.4	17.8	22.5	111	222
312	0.000	1.000	0.345	0.0452	60.5	20.2	25.5	126	251
353	0.000	1.000	0.305	0.0511	68.4	22.8	28.8	143	284
401	0.000	1.000	0.269	0.0580	77.6	25.9	32.7	162	322
449	0.000	1.000	0.240	0.0650	87.1	29.0	36.7	182	362
510	0.000	1.000	0.211	0.0738	98.9	33.0	41.6	206	410
577	0.000	1.000	0.187	0.0835	112	37.3	47.1	234	464
649	0.000	1.000	0.166	0.0940	126	41.9	53.0	263	522
739	0.000	1.000	0.146	0.107	143	47.7	60.3	298	594
832	0.000	1.000	0.130	0.120	161	53.7	67.9	336	669
941	0.000	1.000	0.115	0.136	182	60.8	76.7	380	756
1090	0.000	1.000	0.0992	0.157	210	70.2	88.6	438	873
1210	0.000	1.000	0.0887	0.176	235	78.5	99.1	490	976
1380	0.000	1.000	0.0782	0.199	267	89.0	112	557	1100
1550	0.000	1.000	0.0694	0.225	301	100	127	628	1250
1750	0.000	1.000	0.0616	0.253	339	113	143	707	1410
1970	0.003	0.997	0.0547	0.285	382	127	161	797	1590
2240	0.005	0.995	0.0480	0.325	435	145	183	907	1800
2530	0.008	0.992	0.0426	0.366	490	163	206	1020	2030
2850	0.010	0.990	0.0378	0.413	552	184	233	1150	2300
3230	0.012	0.988	0.0334	0.468	626	209	264	1310	2600
3650	0.015	0.985	0.0295	0.528	707	236	298	1470	2940
4160	0.017	0.983	0.0259	0.602	806	269	339	1680	3340
4660	0.020	0.980	0.0231	0.675	904	301	380	1890	3740
5280	0.024	0.976	0.0204	0.764	1020	341	431	2130	4250
5970	0.028	0.972	0.0181	0.863	1160	385	487	2420	4800
6750	0.034	0.966	0.0160	0.977	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	3m	un-	Host Plug	
Depth, meters:	515.01	stressed	1250psi	na
Klinkenberg Permeability, md:		0.005	0.474	-
Permeability to Air, md:		0.018	-	-
Swanson Permeability, md:		0.0003	-	-
Total Porosity, fraction:		0.081	0.069	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0080		
R50 (median pore throat radius):		0.0069		

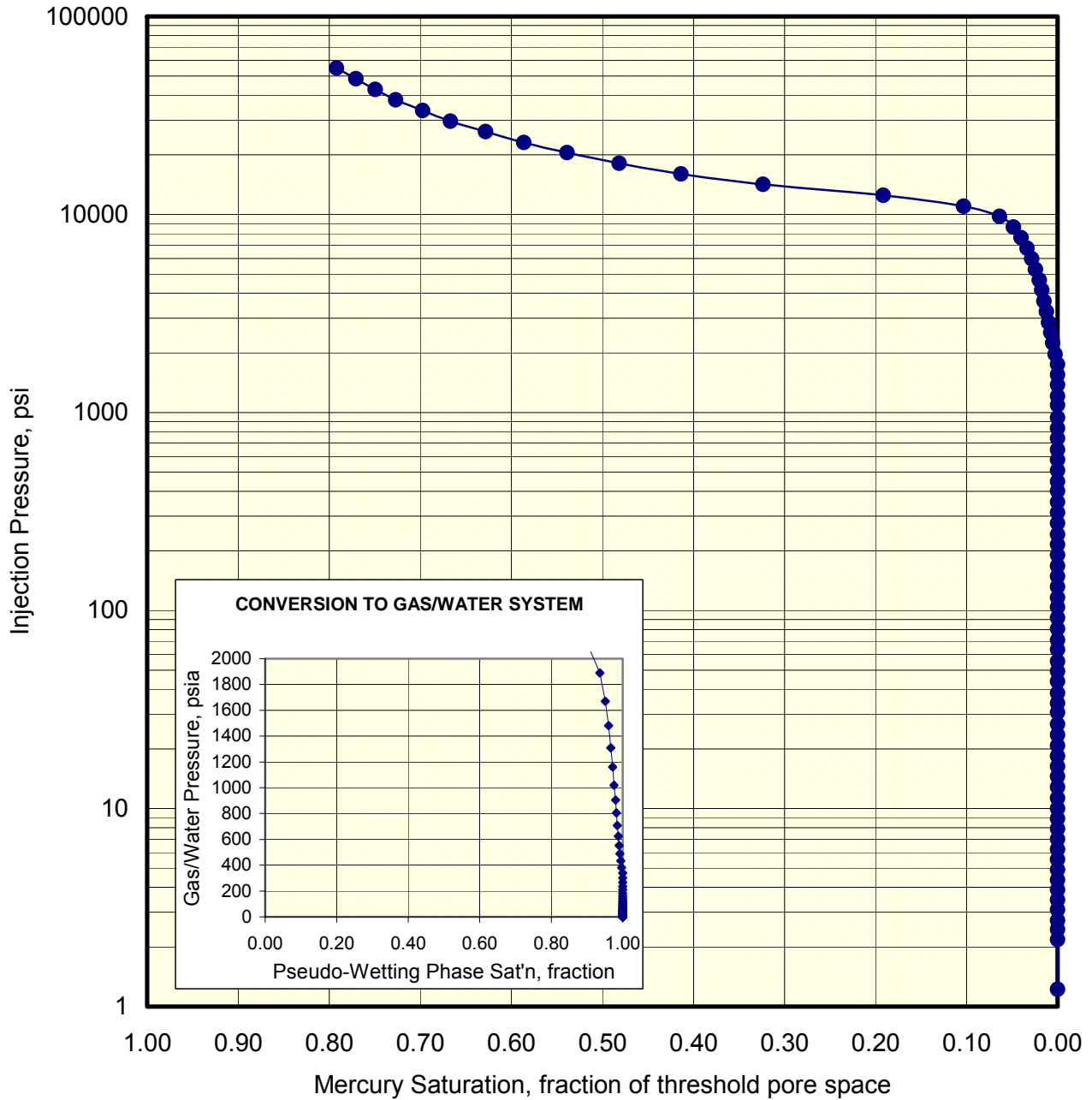
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.040	0.960	0.0141	1.10	1480	493	623	3090	6140
8640	0.048	0.952	0.0125	1.25	1670	558	705	3480	6950
9770	0.064	0.936	0.0110	1.41	1890	631	797	3940	7850
11000	0.103	0.897	0.00975	1.60	2140	714	901	4460	8880
12500	0.192	0.808	0.00862	1.81	2420	807	1020	5050	10000
14200	0.324	0.676	0.00761	2.05	2740	914	1150	5710	11300
16000	0.414	0.586	0.00675	2.31	3100	1030	1300	6460	12800
18100	0.481	0.519	0.00596	2.62	3510	1170	1480	7320	14600
20500	0.539	0.461	0.00526	2.96	3970	1320	1670	8280	16500
23100	0.586	0.414	0.00466	3.35	4480	1490	1890	9340	18600
26200	0.628	0.372	0.00412	3.79	5070	1690	2130	10600	21000
29600	0.667	0.333	0.00364	4.28	5730	1910	2410	11900	23700
33500	0.698	0.302	0.00321	4.85	6500	2170	2740	13600	27000
37900	0.727	0.273	0.00284	5.49	7350	2450	3090	15300	30400
42800	0.749	0.251	0.00252	6.20	8300	2770	3490	17300	34400
48400	0.771	0.229	0.00223	7.00	9380	3130	3950	19600	38900
54900	0.792	0.208	0.00196	7.95	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	3m	un-stressed	Host Plug	
Depth, meters:	515.01		1250psi	na
Klinkenberg Permeability, md:		0.005	0.474	-
Permeability to Air, md:		0.018	-	-
Swanson Permeability, md:		0.0003	-	-
Total Porosity, fraction:		0.081	0.069	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0080		
R50 (median pore throat radius):		0.0069		

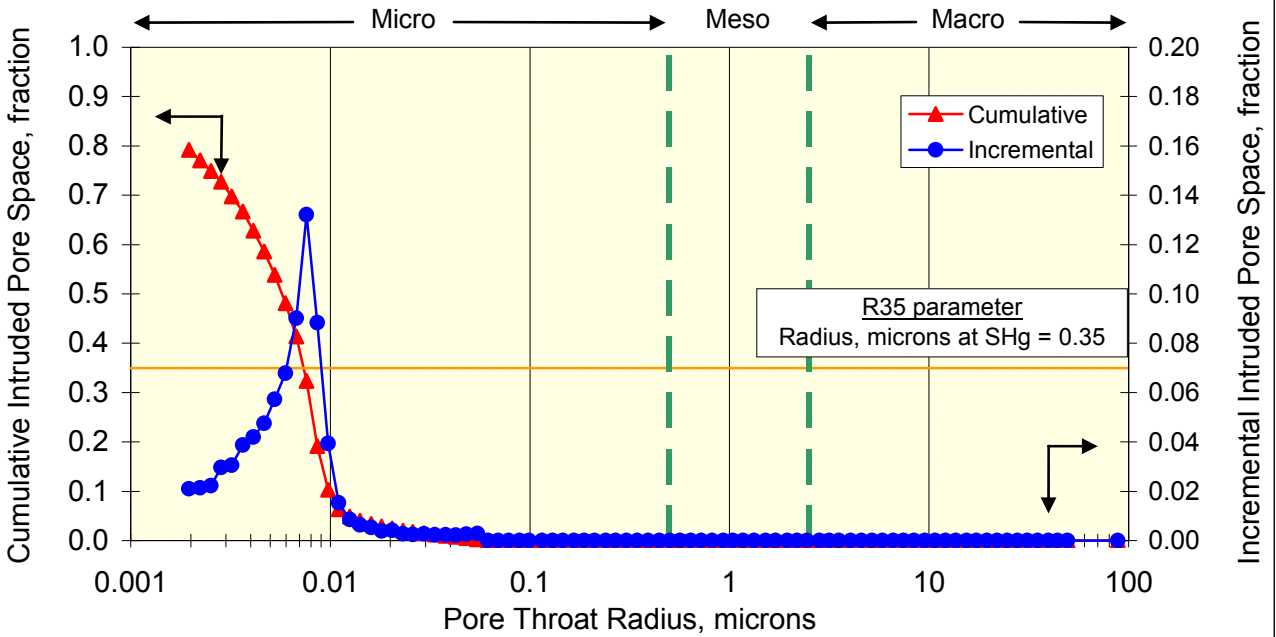
MERCURY INJECTION



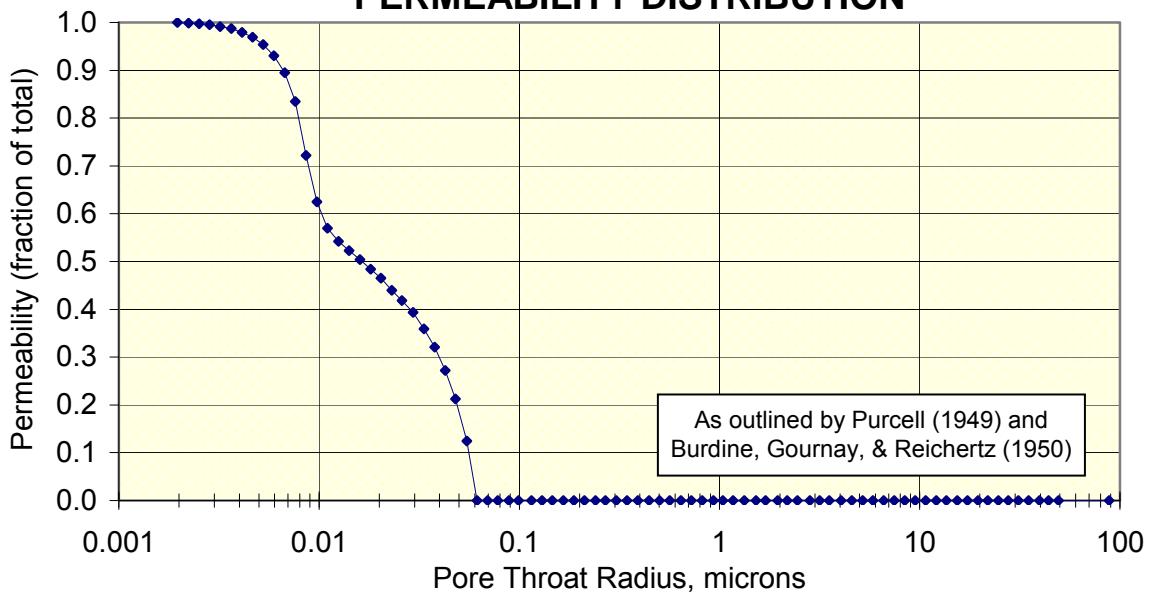
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	3m	un-	Host Plug	
Depth, meters:	515.01	stressed	1250psi	na
Klinkenberg Permeability, md:	0.005	0.005	0.474	-
Permeability to Air, md:	0.018	0.018	-	-
Swanson Permeability, md:	0.0003	0.0003	-	-
Total Porosity, fraction:	0.081	0.081	0.069	-
maximum Sb/Pc, fraction:	0.0002	0.0002	-	-
R35, microns:	0.0080	0.0080	-	-
R50 (median pore throat radius):	0.0069	0.0069	-	-

PORE THROAT RADIUS DISTRIBUTION



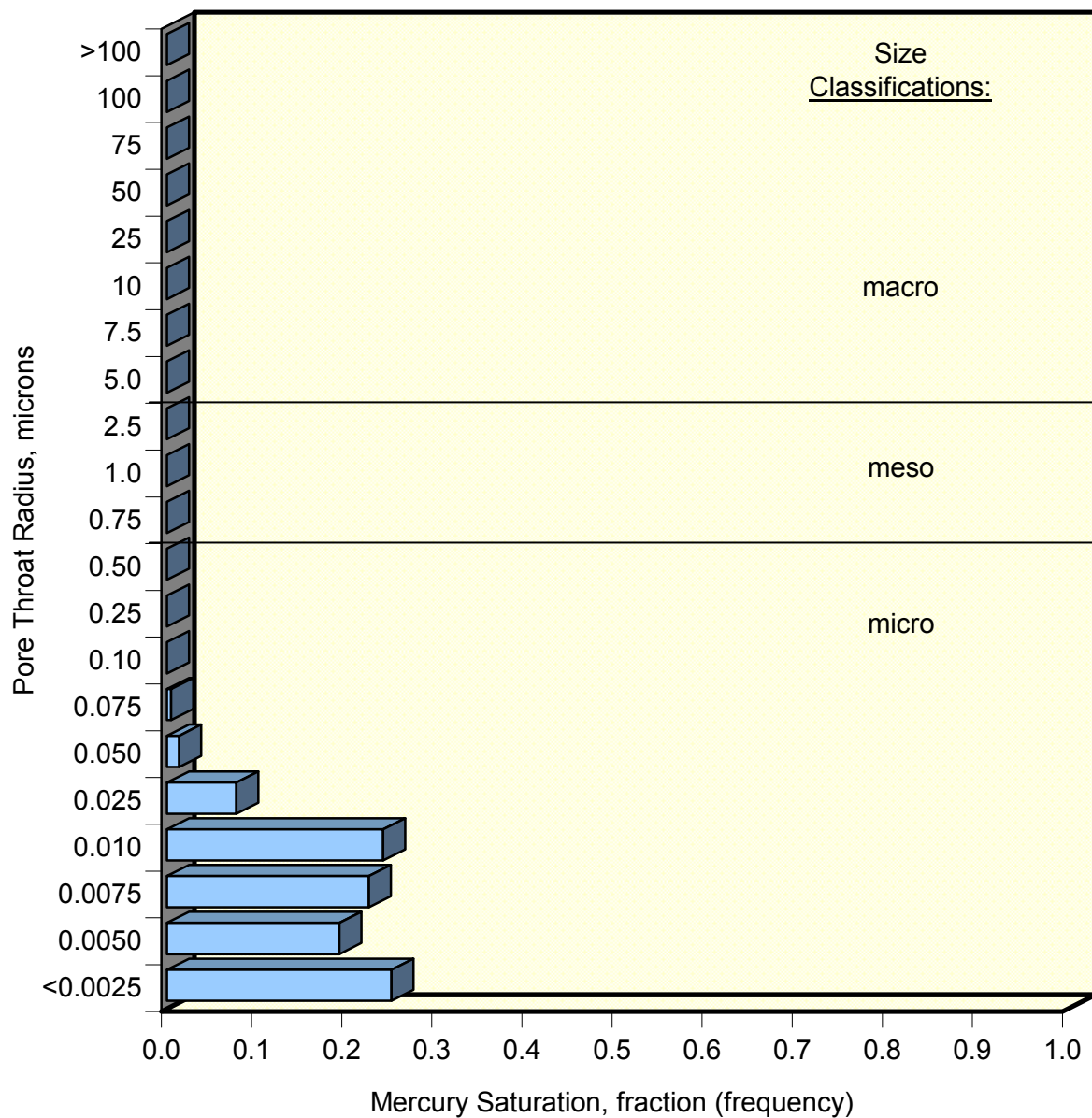
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	3m	un-	Host Plug
Depth, meters:	515.01	stressed	1250psi na
Klinkenberg Permeability, md:		0.005	0.474 -
Permeability to Air, md:		0.018	- -
Swanson Permeability, md:		0.0003	- -
Total Porosity, fraction:		0.081	0.069 -
maximum Sb/Pc, fraction:		0.0002	
R35, microns:		0.0080	
R50 (median pore throat radius):		0.0069	

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	4m	un-	Host Plug	
Depth, meters:	540.00	stressed	1325psi	na
Klinkenberg Permeability, md:		0.047	0.0098	-
Permeability to Air, md:		0.088	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.068	0.009	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0093		
R50 (median pore throat radius):		0.0073		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.22	0.000	1.000	88.3	0.000589	0.236	0.0788	0.0995	0.492	0.980
2.18	0.000	1.000	49.4	0.00105	0.422	0.141	0.178	0.88	1.75
2.45	0.000	1.000	44.0	0.00118	0.475	0.158	0.200	0.991	1.97
2.72	0.000	1.000	39.6	0.00131	0.527	0.176	0.222	1.10	2.19
3.08	0.000	1.000	35.0	0.00149	0.597	0.199	0.251	1.24	2.47
3.46	0.000	1.000	31.1	0.00167	0.671	0.224	0.282	1.40	2.78
3.89	0.000	1.000	27.7	0.00188	0.754	0.251	0.317	1.57	3.12
4.36	0.000	1.000	24.7	0.00211	0.845	0.282	0.356	1.76	3.51
4.91	0.000	1.000	21.9	0.00237	0.952	0.317	0.401	1.99	3.95
5.53	0.000	1.000	19.5	0.00267	1.07	0.357	0.451	2.23	4.44
6.23	0.000	1.000	17.3	0.00301	1.21	0.402	0.508	2.52	5.00
7.01	0.000	1.000	15.4	0.00339	1.36	0.453	0.572	2.84	5.64
7.91	0.000	1.000	13.6	0.00382	1.53	0.511	0.645	3.19	6.35
8.90	0.000	1.000	12.1	0.00430	1.72	0.575	0.726	3.59	7.15
10.0	0.000	1.000	10.7	0.00485	1.94	0.648	0.818	4.05	8.06
11.3	0.000	1.000	9.51	0.00547	2.20	0.732	0.924	4.59	9.10
12.8	0.000	1.000	8.42	0.00618	2.48	0.826	1.04	5.17	10.2
14.5	0.000	1.000	7.45	0.00699	2.80	0.934	1.18	5.84	11.6
16.3	0.000	1.000	6.61	0.00787	3.16	1.05	1.33	6.59	13.1
18.4	0.000	1.000	5.84	0.00891	3.57	1.19	1.50	7.44	14.8
20.8	0.000	1.000	5.18	0.0101	4.03	1.34	1.70	8.40	16.7
23.5	0.000	1.000	4.58	0.0114	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.0129	5.16	1.72	2.17	10.8	21.4
30.3	0.000	1.000	3.55	0.0146	5.88	1.96	2.47	12.3	24.3
33.8	0.000	1.000	3.18	0.0163	6.56	2.19	2.76	13.7	27.2
38.1	0.000	1.000	2.83	0.0184	7.37	2.46	3.10	15.4	30.5
43.7	0.000	1.000	2.46	0.0211	8.47	2.82	3.57	17.7	35.2
49.2	0.000	1.000	2.19	0.0238	9.53	3.18	4.01	19.9	39.5
55.2	0.000	1.000	1.95	0.0267	10.7	3.56	4.50	22.3	44.3
63.2	0.000	1.000	1.70	0.0305	12.2	4.08	5.16	25.4	50.8
70.8	0.000	1.000	1.52	0.0342	13.7	4.57	5.78	28.6	56.9
80.5	0.000	1.000	1.34	0.0389	15.6	5.2	6.57	32.5	64.7
91.5	0.000	1.000	1.18	0.0442	17.7	5.91	7.46	36.9	73.5
103	0.000	1.000	1.04	0.0500	20.1	6.68	8.44	41.9	83.2

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	4m	un-	Host Plug	
Depth, meters:	540.00	stressed	1325psi	na
Klinkenberg Permeability, md:		0.047	0.0098	-
Permeability to Air, md:		0.088	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.068	0.009	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0093		
R50 (median pore throat radius):		0.0073		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.932	0.0558	22.4	7.47	9.43	46.7	92.9
131	0.000	1.000	0.821	0.0634	25.4	8.48	10.7	53.0	105
149	0.000	1.000	0.724	0.0719	28.8	9.61	12.1	60.1	119
168	0.000	1.000	0.640	0.0813	32.6	10.9	13.7	68.0	135
191	0.000	1.000	0.565	0.0921	36.9	12.3	15.5	77.0	153
215	0.000	1.000	0.502	0.104	41.6	13.9	17.5	86.8	172
242	0.000	1.000	0.446	0.117	46.9	15.6	19.7	97.8	194
275	0.000	1.000	0.391	0.133	53.4	17.8	22.5	111	222
312	0.000	1.000	0.345	0.151	60.5	20.2	25.5	126	251
353	0.000	1.000	0.305	0.171	68.4	22.8	28.8	143	284
400	0.000	1.000	0.269	0.193	77.6	25.9	32.7	162	322
449	0.000	1.000	0.240	0.217	87.0	29.0	36.6	181	361
510	0.000	1.000	0.211	0.246	98.8	32.9	41.6	206	410
577	0.000	1.000	0.187	0.279	112	37.3	47.1	234	464
649	0.000	1.000	0.166	0.314	126	41.9	53.0	263	522
739	0.000	1.000	0.146	0.357	143	47.7	60.3	298	594
831	0.000	1.000	0.130	0.402	161	53.7	67.8	336	668
940	0.000	1.000	0.115	0.454	182	60.7	76.7	380	756
1090	0.000	1.000	0.0992	0.525	210	70.1	88.6	438	873
1210	0.000	1.000	0.0887	0.587	235	78.5	99.1	490	976
1380	0.000	1.000	0.0782	0.665	267	89.0	112	557	1100
1550	0.000	1.000	0.0694	0.750	301	100	127	628	1250
1750	0.000	1.000	0.0616	0.845	339	113	143	707	1410
1970	0.000	1.000	0.0547	0.951	382	127	161	797	1590
2240	0.002	0.998	0.0480	1.08	435	145	183	907	1800
2530	0.004	0.996	0.0426	1.22	490	163	206	1020	2030
2850	0.007	0.993	0.0378	1.38	552	184	233	1150	2300
3230	0.010	0.990	0.0334	1.56	626	209	264	1310	2600
3650	0.013	0.987	0.0295	1.76	707	236	298	1470	2940
4160	0.017	0.983	0.0259	2.01	806	269	339	1680	3340
4660	0.023	0.977	0.0231	2.25	904	301	380	1890	3740
5280	0.039	0.961	0.0204	2.55	1020	341	431	2130	4250
5970	0.054	0.946	0.0181	2.88	1160	385	487	2420	4800
6750	0.082	0.918	0.0160	3.26	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	4m	un-	Host Plug	
Depth, meters:	540.00	stressed	1325psi	na
Klinkenberg Permeability, md:		0.047	0.0098	-
Permeability to Air, md:		0.088	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.068	0.009	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0093		
R50 (median pore throat radius):		0.0073		

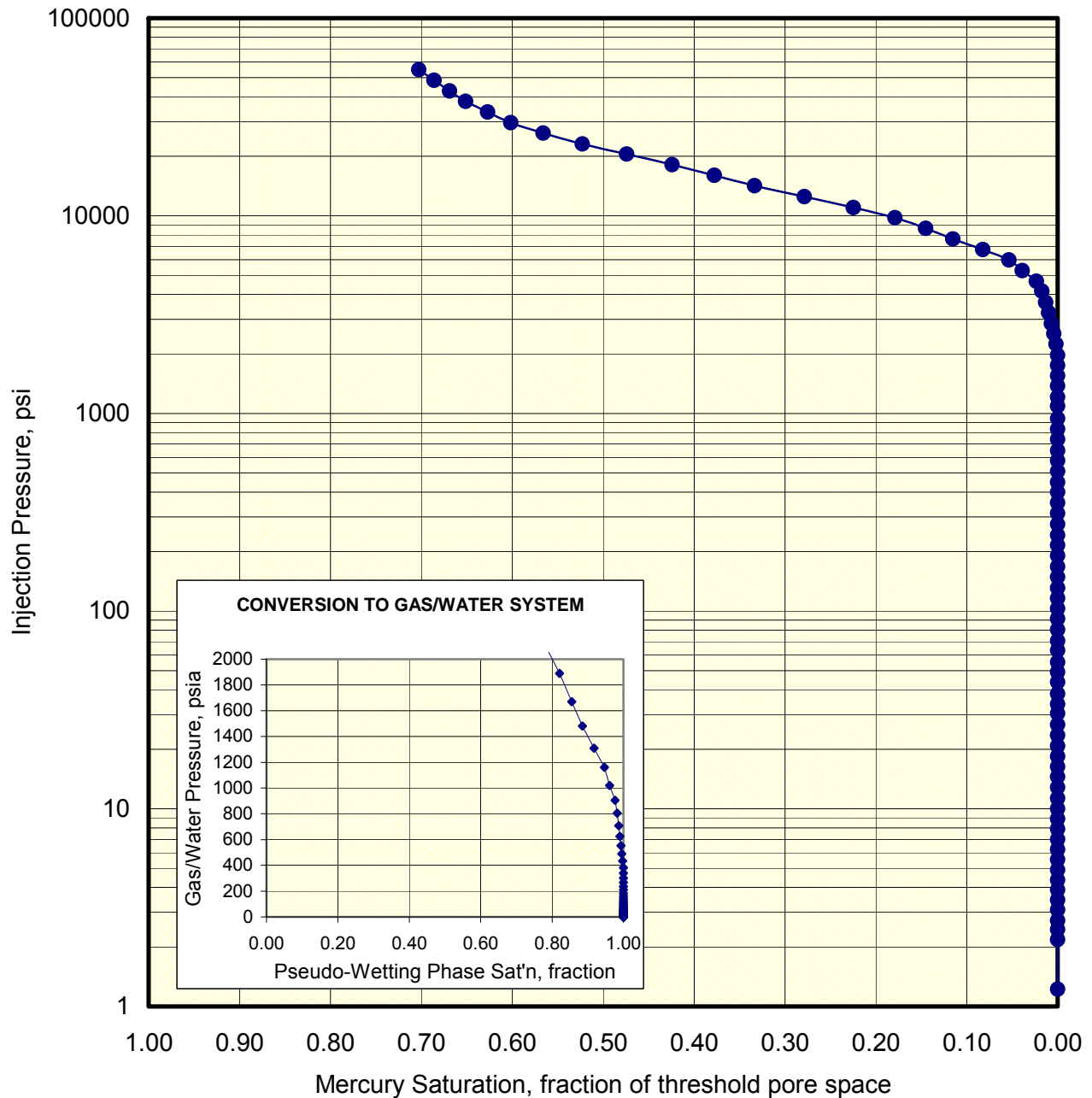
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.115	0.885	0.0141	3.69	1480	493	623	3090	6140
8640	0.145	0.855	0.0125	4.17	1670	558	705	3480	6950
9770	0.179	0.821	0.0110	4.72	1890	631	797	3940	7850
11000	0.225	0.775	0.00976	5.34	2140	713	901	4460	8880
12500	0.279	0.721	0.00862	6.04	2420	807	1020	5050	10000
14200	0.333	0.667	0.00761	6.84	2740	914	1150	5710	11300
16000	0.378	0.622	0.00675	7.72	3100	1030	1300	6460	12800
18100	0.424	0.576	0.00596	8.74	3510	1170	1480	7320	14600
20500	0.474	0.526	0.00526	9.89	3970	1320	1670	8280	16500
23100	0.523	0.477	0.00466	11.2	4480	1490	1890	9340	18600
26200	0.566	0.434	0.00412	12.6	5070	1690	2130	10600	21000
29600	0.602	0.398	0.00364	14.3	5730	1910	2410	11900	23700
33500	0.627	0.373	0.00321	16.2	6500	2170	2740	13600	27000
37900	0.651	0.349	0.00284	18.3	7350	2450	3090	15300	30400
42800	0.669	0.331	0.00252	20.7	8300	2770	3490	17300	34400
48400	0.686	0.314	0.00223	23.4	9380	3130	3950	19600	38900
54900	0.703	0.297	0.00196	26.5	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	4m	un-stressed	Host Plug	
Depth, meters:	540.00		1325psi	na
Klinkenberg Permeability, md:		0.047	0.0098	-
Permeability to Air, md:		0.088	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.068	0.009	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0093		
R50 (median pore throat radius):		0.0073		

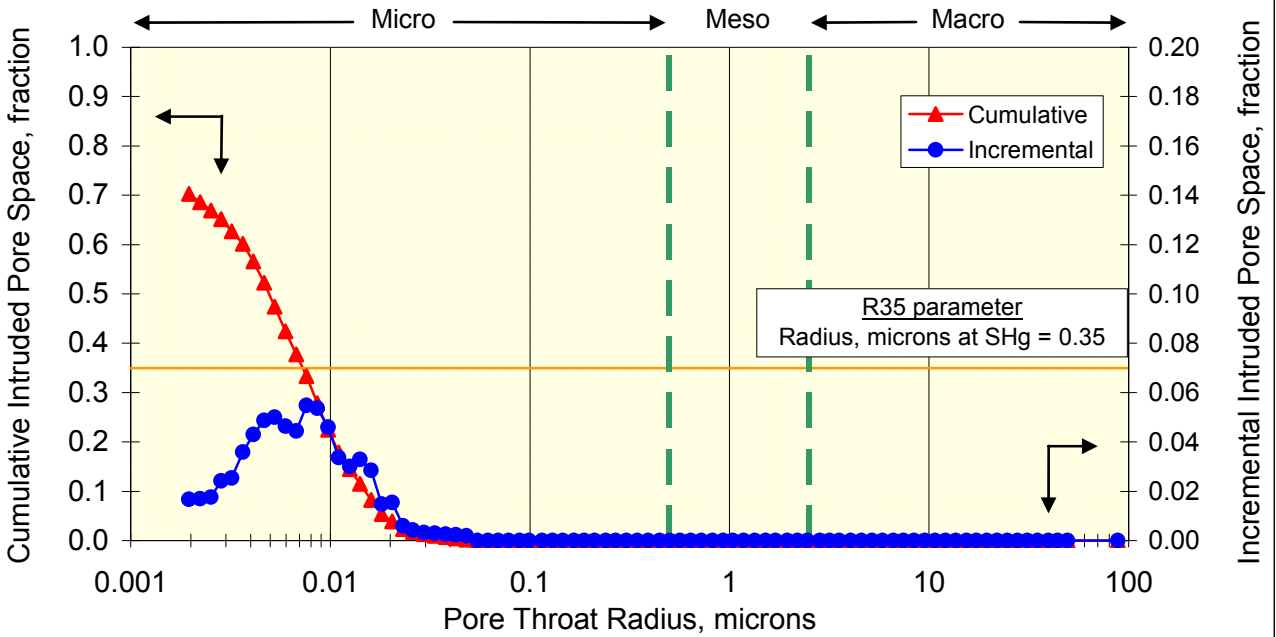
MERCURY INJECTION



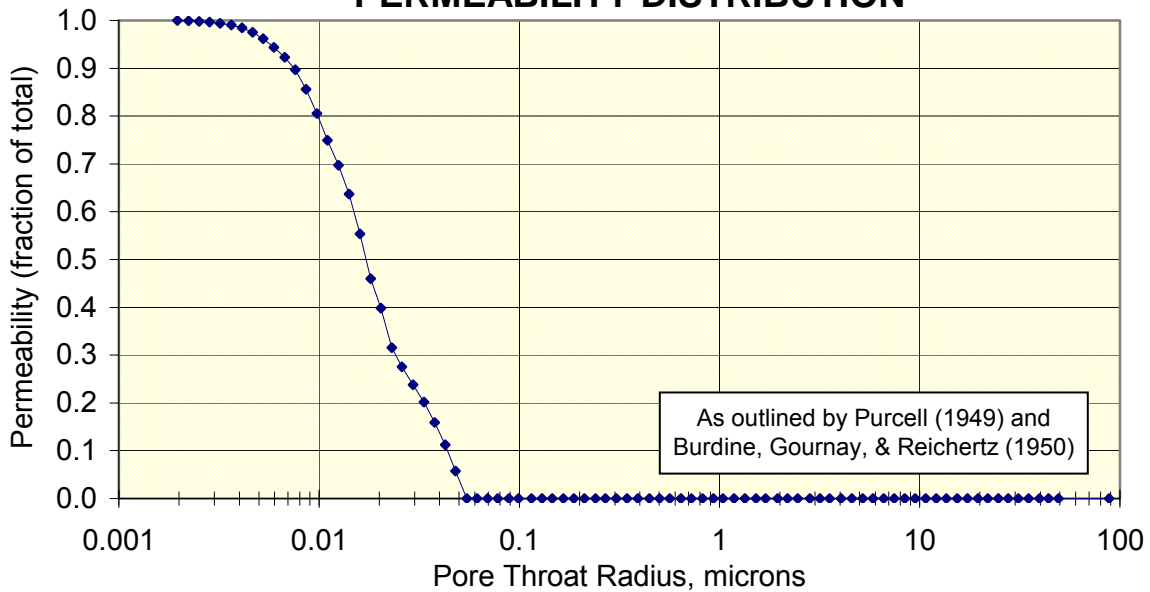
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	4m	un-	Host Plug	
Depth, meters:	540.00	stressed	1325psi	na
Klinkenberg Permeability, md:		0.047	0.0098	-
Permeability to Air, md:		0.088	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.068	0.009	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0093		
R50 (median pore throat radius):		0.0073		

PORE THROAT RADIUS DISTRIBUTION



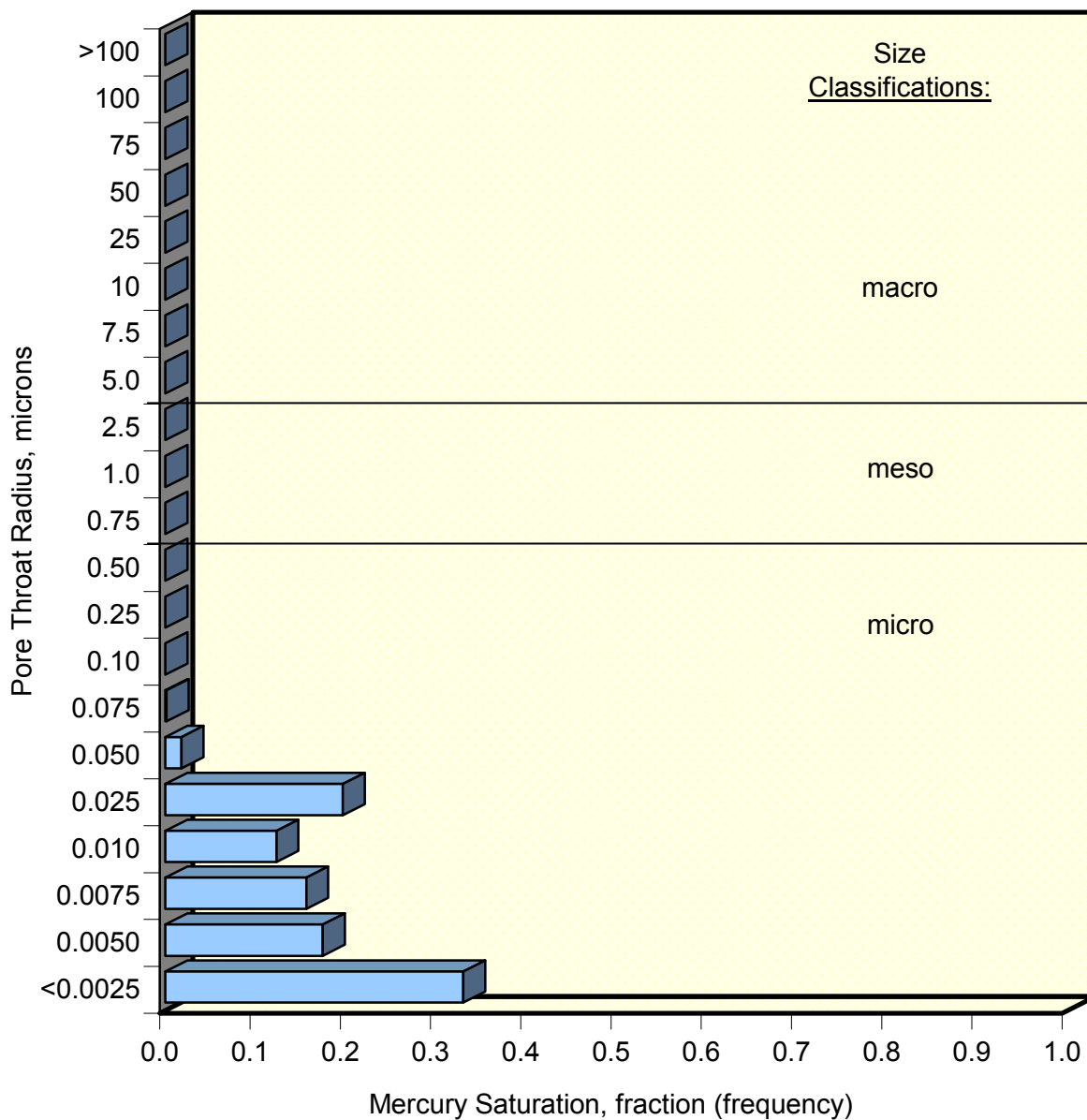
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	4m	un-stressed	Host Plug	
Depth, meters:	540.00		1325psi	na
Klinkenberg Permeability, md:		0.047	0.0098	-
Permeability to Air, md:		0.088	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.068	0.009	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0093		
R50 (median pore throat radius):		0.0073		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	5m	un-	Host Plug	
Depth, meters:	556.33	stressed	1375psi	na
Klinkenberg Permeability, md:		0.003	0.535	-
Permeability to Air, md:		0.012	-	-
Swanson Permeability, md:		0.00002	-	-
Total Porosity, fraction:		0.032	0.030	-
maximum Sb/Pc, fraction:		0.0000		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0055		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.13	0.000	1.000	95.3	0.000201	0.219	0.0730	0.0922	0.457	0.908
2.13	0.000	1.000	50.6	0.000379	0.413	0.138	0.174	0.861	1.71
2.39	0.000	1.000	45.1	0.000425	0.463	0.154	0.195	0.966	1.92
2.69	0.000	1.000	40.1	0.000479	0.521	0.174	0.219	1.09	2.16
3.02	0.000	1.000	35.7	0.000537	0.585	0.195	0.246	1.22	2.42
3.40	0.000	1.000	31.7	0.000605	0.659	0.220	0.277	1.37	2.73
3.81	0.000	1.000	28.3	0.000678	0.738	0.246	0.311	1.54	3.06
4.30	0.000	1.000	25.1	0.000765	0.833	0.278	0.351	1.74	3.46
4.86	0.000	1.000	22.2	0.000865	0.942	0.314	0.396	1.96	3.90
5.46	0.000	1.000	19.7	0.000972	1.06	0.353	0.445	2.21	4.38
6.16	0.000	1.000	17.5	0.00110	1.19	0.398	0.503	2.48	4.96
6.95	0.000	1.000	15.5	0.00124	1.35	0.449	0.567	2.82	5.59
7.85	0.000	1.000	13.7	0.00140	1.52	0.507	0.640	3.17	6.31
8.85	0.000	1.000	12.2	0.00157	1.72	0.572	0.722	3.59	7.11
10.0	0.000	1.000	10.8	0.00178	1.94	0.646	0.816	4.05	8.04
11.3	0.000	1.000	9.55	0.00201	2.19	0.729	0.920	4.57	9.06
12.8	0.000	1.000	8.44	0.00227	2.47	0.824	1.04	5.15	10.2
14.4	0.000	1.000	7.48	0.00256	2.79	0.931	1.18	5.82	11.6
16.3	0.000	1.000	6.63	0.00289	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.86	0.00327	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.00370	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.58	0.00418	4.55	1.52	1.92	9.49	18.9
26.6	0.000	1.000	4.06	0.00472	5.15	1.72	2.17	10.7	21.4
30.0	0.000	1.000	3.59	0.00535	5.82	1.94	2.45	12.1	24.1
34.3	0.000	1.000	3.14	0.00610	6.64	2.21	2.80	13.8	27.6
38.7	0.000	1.000	2.78	0.00689	7.50	2.50	3.16	15.6	31.1
43.6	0.000	1.000	2.47	0.00776	8.45	2.82	3.56	17.6	35.1
49.8	0.000	1.000	2.17	0.00885	9.64	3.21	4.06	20.1	40.0
55.8	0.000	1.000	1.93	0.00993	10.8	3.60	4.55	22.5	44.8
63.5	0.000	1.000	1.70	0.0113	12.3	4.10	5.18	25.7	51.0
71.6	0.000	1.000	1.50	0.0127	13.9	4.63	5.84	29.0	57.5
80.8	0.000	1.000	1.33	0.0144	15.7	5.22	6.59	32.7	64.9
90.9	0.000	1.000	1.18	0.0162	17.6	5.87	7.42	36.7	73.1
103	0.000	1.000	1.04	0.0184	20.0	6.66	8.42	41.7	83.0

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	5m	un-	Host Plug	
Depth, meters:	556.33	stressed	1375psi	na
Klinkenberg Permeability, md:		0.003	0.535	-
Permeability to Air, md:		0.012	-	-
Swanson Permeability, md:		0.00002	-	-
Total Porosity, fraction:		0.032	0.030	-
maximum Sb/Pc, fraction:		0.0000		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0055		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.933	0.0206	22.4	7.46	9.43	46.7	92.9
132	0.000	1.000	0.816	0.0235	25.6	8.53	10.8	53.4	106
149	0.000	1.000	0.724	0.0265	28.8	9.61	12.1	60.1	119
168	0.000	1.000	0.640	0.0300	32.6	10.9	13.7	68.0	135
191	0.000	1.000	0.563	0.0341	37.1	12.4	15.6	77.4	154
214	0.000	1.000	0.503	0.0381	41.5	13.8	17.5	86.5	172
243	0.000	1.000	0.443	0.0433	47.1	15.7	19.8	98.2	195
278	0.000	1.000	0.387	0.0496	54.0	18.0	22.7	113	224
311	0.000	1.000	0.346	0.0554	60.3	20.1	25.4	126	250
354	0.000	1.000	0.305	0.0629	68.5	22.8	28.8	143	284
400	0.000	1.000	0.270	0.0711	77.5	25.8	32.6	162	321
450	0.000	1.000	0.239	0.0801	87.3	29.1	36.7	182	362
509	0.000	1.000	0.212	0.0906	98.6	32.9	41.5	206	409
575	0.000	1.000	0.187	0.102	111	37.2	46.9	231	462
651	0.000	1.000	0.166	0.116	126	42.0	53.1	263	523
739	0.000	1.000	0.146	0.131	143	47.7	60.3	298	594
832	0.000	1.000	0.129	0.148	161	53.8	67.9	336	669
945	0.000	1.000	0.114	0.168	183	61.0	77.1	382	760
1100	0.000	1.000	0.0979	0.196	213	71.1	89.8	444	885
1230	0.000	1.000	0.0878	0.218	238	79.3	100	496	985
1400	0.000	1.000	0.0771	0.249	271	90.3	114	565	1120
1580	0.000	1.000	0.0682	0.281	306	102	129	638	1270
1770	0.000	1.000	0.0610	0.314	342	114	144	713	1420
1990	0.000	1.000	0.0541	0.355	386	129	163	805	1610
2280	0.000	1.000	0.0472	0.406	442	147	186	922	1830
2550	0.000	1.000	0.0422	0.454	495	165	208	1030	2050
2870	0.000	1.000	0.0376	0.510	556	185	234	1160	2310
3260	0.003	0.997	0.0330	0.580	632	211	266	1320	2620
3680	0.006	0.994	0.0293	0.654	712	237	300	1480	2960
4220	0.009	0.991	0.0255	0.751	818	273	344	1710	3390
4700	0.012	0.988	0.0229	0.837	911	304	384	1900	3780
5310	0.016	0.984	0.0203	0.945	1030	343	433	2150	4270
5970	0.019	0.981	0.0181	1.06	1160	385	487	2420	4800
6760	0.025	0.975	0.0159	1.20	1310	437	552	2730	5440

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	5m	un-	Host Plug	
Depth, meters:	556.33	stressed	1375psi	na
Klinkenberg Permeability, md:		0.003	0.535	-
Permeability to Air, md:		0.012	-	-
Swanson Permeability, md:		0.00002	-	-
Total Porosity, fraction:		0.032	0.030	-
maximum Sb/Pc, fraction:		0.0000		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0055		

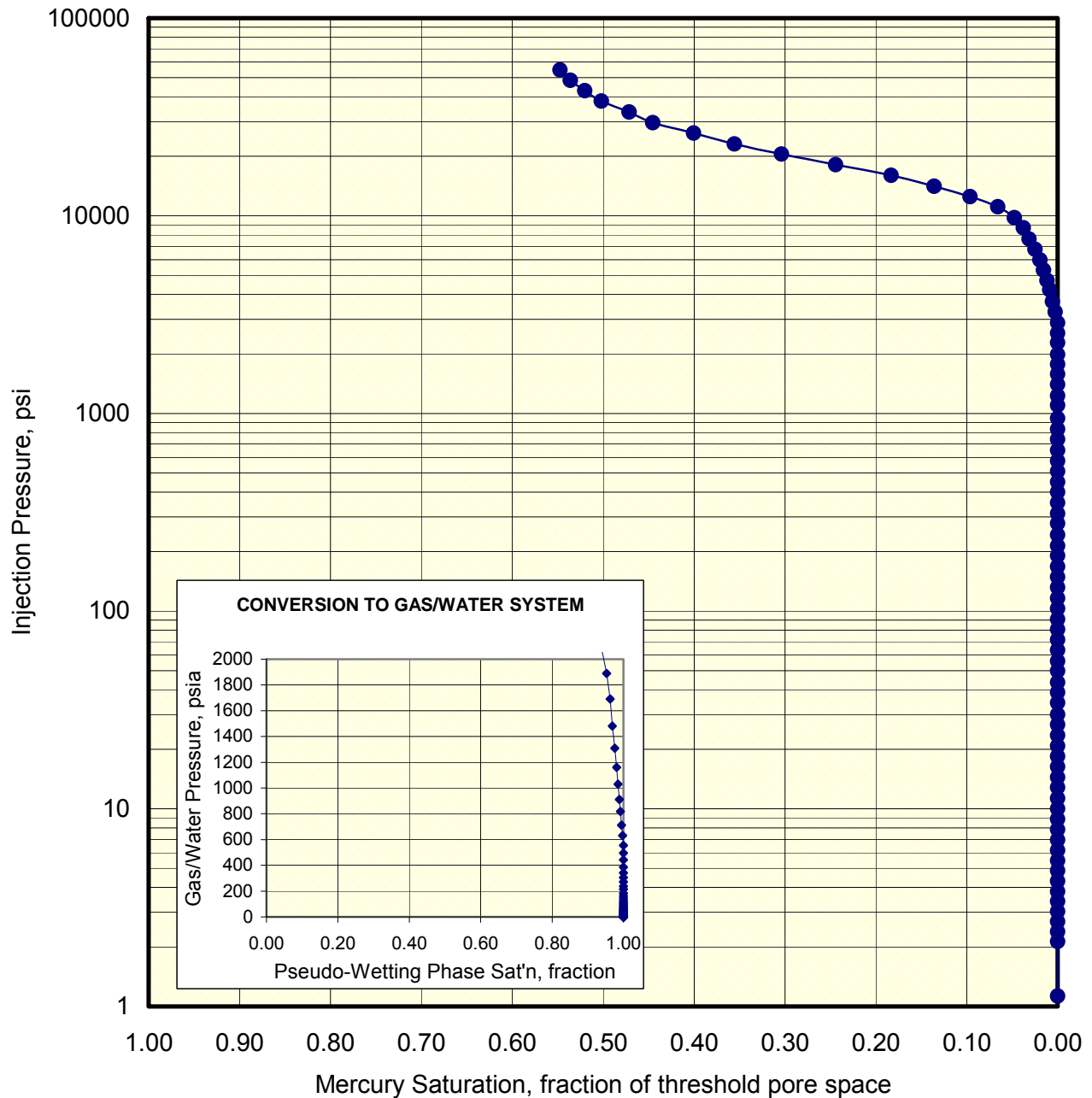
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.032	0.968	0.0141	1.36	1480	494	624	3090	6150
8700	0.038	0.962	0.0124	1.55	1690	562	709	3520	6990
9770	0.048	0.952	0.0110	1.74	1890	631	797	3940	7850
11100	0.066	0.934	0.00975	1.97	2140	714	902	4460	8890
12500	0.096	0.904	0.00862	2.22	2420	807	1020	5050	10000
14100	0.136	0.864	0.00762	2.52	2740	914	1150	5710	11300
16000	0.183	0.817	0.00674	2.84	3100	1030	1300	6460	12800
18100	0.244	0.756	0.00595	3.22	3510	1170	1480	7320	14600
20500	0.304	0.696	0.00526	3.64	3970	1320	1670	8280	16500
23100	0.356	0.644	0.00466	4.12	4480	1490	1890	9340	18600
26200	0.400	0.600	0.00412	4.65	5070	1690	2130	10600	21000
29600	0.445	0.555	0.00364	5.27	5740	1910	2420	12000	23800
33500	0.471	0.529	0.00322	5.96	6490	2160	2730	13500	26900
38000	0.502	0.498	0.00284	6.75	7360	2450	3100	15300	30500
42900	0.520	0.480	0.00251	7.64	8320	2770	3500	17400	34500
48400	0.536	0.464	0.00223	8.62	9380	3130	3950	19600	38900
54700	0.548	0.452	0.00197	9.74	10600	3540	4460	22100	43900

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	5m	un-	Host Plug	
Depth, meters:	556.33	stressed	1375psi	na
Klinkenberg Permeability, md:		0.003	0.535	-
Permeability to Air, md:		0.012	-	-
Swanson Permeability, md:		0.00002	-	-
Total Porosity, fraction:		0.032	0.030	-
maximum Sb/Pc, fraction:		0.0000		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0055		

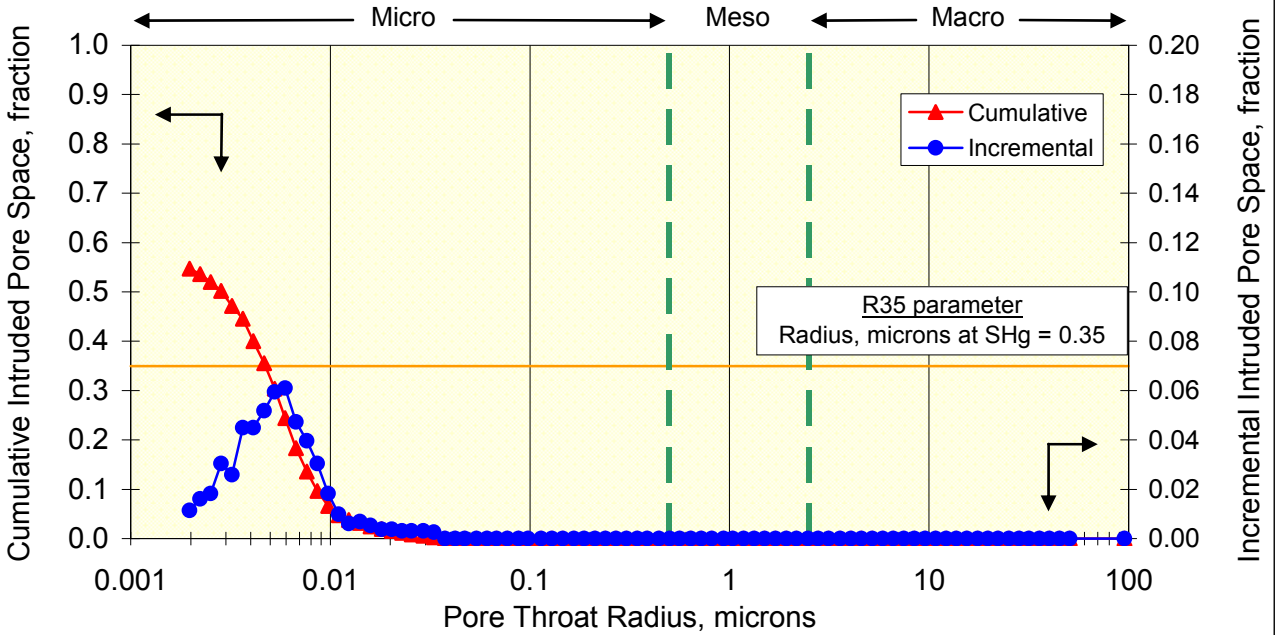
MERCURY INJECTION



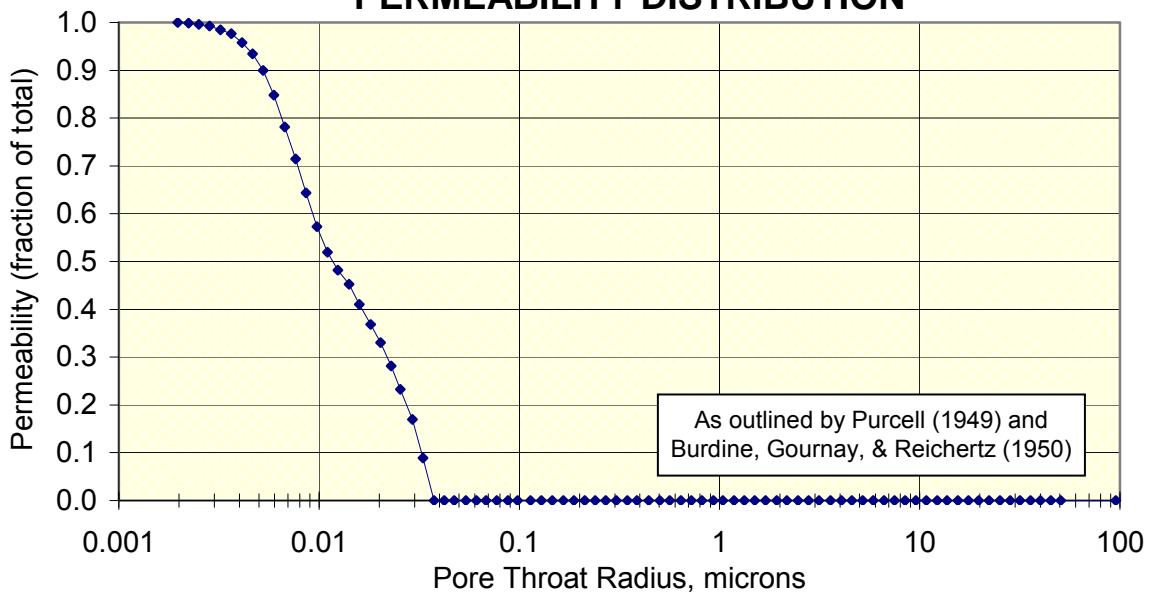
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	5m	un-	Host Plug	
Depth, meters:	556.33	stressed	1375psi	na
Klinkenberg Permeability, md:		0.003	0.535	-
Permeability to Air, md:		0.012	-	-
Swanson Permeability, md:		0.00002	-	-
Total Porosity, fraction:		0.032	0.030	-
maximum Sb/Pc, fraction:		0.0000		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0055		

PORE THROAT RADIUS DISTRIBUTION



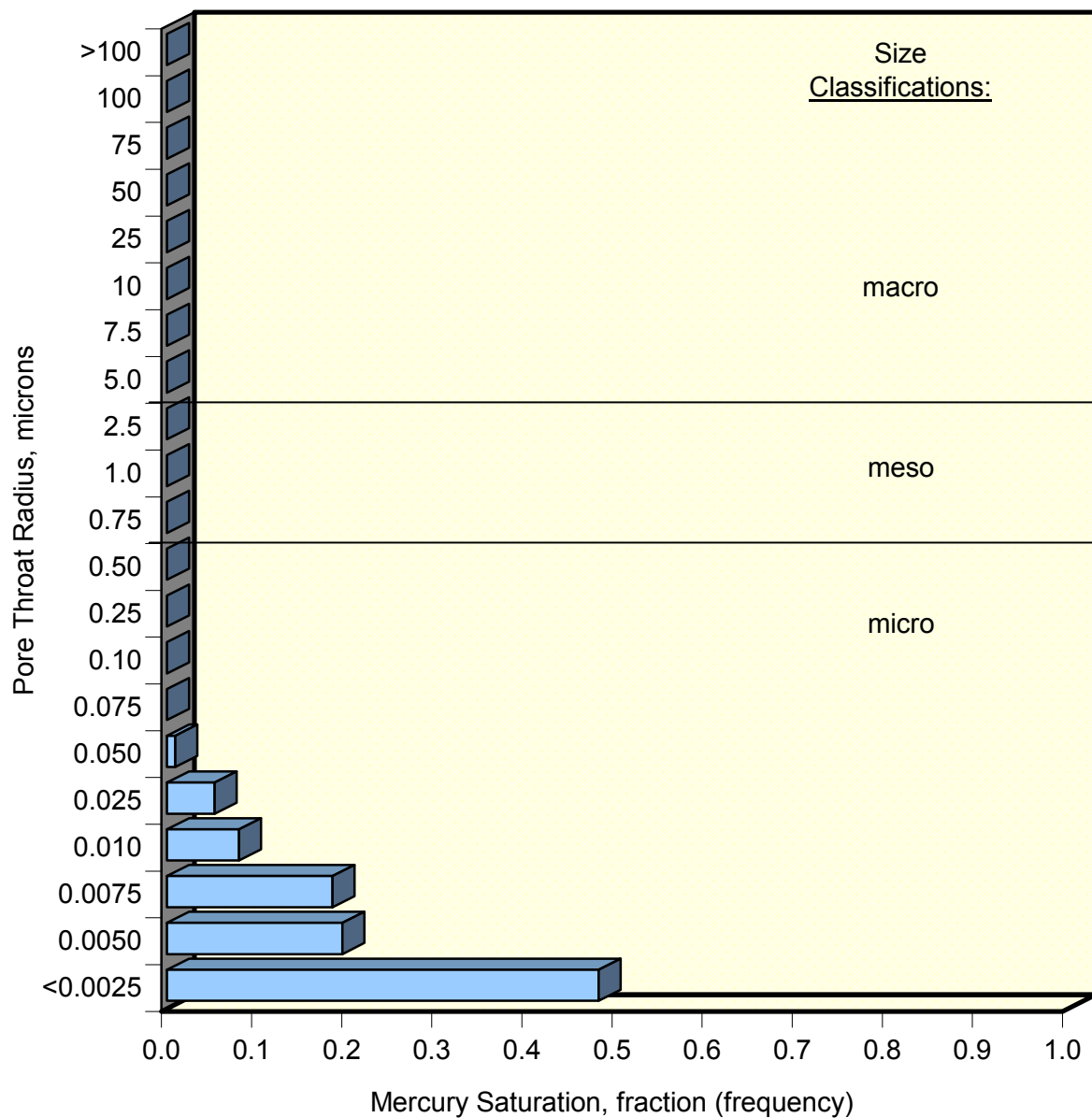
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	5m	un-	Host Plug	
Depth, meters:	556.33	stressed	1375psi	na
Klinkenberg Permeability, md:		0.003	0.535	-
Permeability to Air, md:		0.012	-	-
Swanson Permeability, md:		0.00002	-	-
Total Porosity, fraction:		0.032	0.030	-
maximum Sb/Pc, fraction:		0.0000		
R35, microns:		0.0065		
R50 (median pore throat radius):		0.0055		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	6m	un-	Host Plug	
Depth, meters:	576.09	stressed	1425psi	na
Klinkenberg Permeability, md:		0.002	0.0157	-
Permeability to Air, md:		0.011	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.018	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.13	0.000	1.000	95.3	0.000101	0.219	0.0730	0.0922	0.457	0.908
2.13	0.000	1.000	50.6	0.000191	0.413	0.138	0.174	0.861	1.71
2.39	0.000	1.000	45.1	0.000215	0.463	0.154	0.195	0.966	1.92
2.69	0.000	1.000	40.1	0.000241	0.521	0.174	0.219	1.09	2.16
3.02	0.000	1.000	35.7	0.000271	0.585	0.195	0.246	1.22	2.42
3.40	0.000	1.000	31.7	0.000305	0.659	0.220	0.277	1.37	2.73
3.81	0.000	1.000	28.3	0.000342	0.738	0.246	0.311	1.54	3.06
4.30	0.000	1.000	25.1	0.000386	0.833	0.278	0.351	1.74	3.46
4.86	0.000	1.000	22.2	0.000436	0.942	0.314	0.396	1.96	3.90
5.46	0.000	1.000	19.7	0.000490	1.06	0.353	0.445	2.21	4.38
6.16	0.000	1.000	17.5	0.000553	1.19	0.398	0.503	2.48	4.96
6.95	0.000	1.000	15.5	0.000624	1.35	0.449	0.567	2.82	5.59
7.85	0.000	1.000	13.7	0.000705	1.52	0.507	0.640	3.17	6.31
8.85	0.000	1.000	12.2	0.000794	1.72	0.572	0.722	3.59	7.11
10.0	0.000	1.000	10.8	0.000898	1.94	0.646	0.816	4.05	8.04
11.3	0.000	1.000	9.55	0.00101	2.19	0.729	0.920	4.57	9.06
12.8	0.000	1.000	8.44	0.00115	2.47	0.824	1.04	5.15	10.2
14.4	0.000	1.000	7.48	0.00129	2.79	0.931	1.18	5.82	11.6
16.3	0.000	1.000	6.63	0.00146	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.86	0.00165	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.00186	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.58	0.00211	4.55	1.52	1.92	9.49	18.9
26.6	0.000	1.000	4.06	0.00238	5.15	1.72	2.17	10.7	21.4
30.2	0.000	1.000	3.57	0.00271	5.84	1.95	2.46	12.2	24.2
34.4	0.000	1.000	3.13	0.00309	6.66	2.22	2.80	13.9	27.6
38.8	0.000	1.000	2.78	0.00348	7.52	2.51	3.17	15.7	31.2
43.7	0.000	1.000	2.46	0.00392	8.47	2.82	3.57	17.7	35.2
49.9	0.000	1.000	2.16	0.00448	9.66	3.22	4.07	20.1	40.1
55.9	0.000	1.000	1.93	0.00502	10.8	3.61	4.56	22.5	44.9
63.6	0.000	1.000	1.69	0.00571	12.3	4.11	5.19	25.7	51.1
71.7	0.000	1.000	1.50	0.00644	13.9	4.63	5.85	29.0	57.6
80.9	0.000	1.000	1.33	0.00726	15.7	5.23	6.60	32.7	65.0
91.1	0.000	1.000	1.18	0.00817	17.6	5.88	7.43	36.7	73.2
103	0.000	1.000	1.04	0.00927	20.0	6.67	8.43	41.7	83.1

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	6m	un-	Host Plug	
Depth, meters:	576.09	stressed	1425psi	na
Klinkenberg Permeability, md:		0.002	0.0157	-
Permeability to Air, md:		0.011	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.018	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.932	0.0104	22.4	7.47	9.43	46.7	92.9
132	0.000	1.000	0.816	0.0119	25.6	8.53	10.8	53.4	106
149	0.000	1.000	0.723	0.0134	28.9	9.62	12.2	60.3	120
168	0.000	1.000	0.640	0.0151	32.6	10.9	13.7	68.0	135
191	0.000	1.000	0.563	0.0172	37.1	12.4	15.6	77.4	154
214	0.000	1.000	0.503	0.0192	41.5	13.8	17.5	86.5	172
243	0.000	1.000	0.443	0.0218	47.2	15.7	19.9	98.4	196
279	0.000	1.000	0.387	0.0250	54.0	18.0	22.7	113	224
311	0.000	1.000	0.346	0.0279	60.3	20.1	25.4	126	250
354	0.000	1.000	0.305	0.0317	68.5	22.8	28.9	143	285
400	0.000	1.000	0.269	0.0359	77.5	25.8	32.6	162	321
450	0.000	1.000	0.239	0.0404	87.3	29.1	36.7	182	362
509	0.000	1.000	0.212	0.0457	98.7	32.9	41.5	206	409
575	0.000	1.000	0.187	0.0516	112	37.2	46.9	234	462
651	0.000	1.000	0.166	0.0584	126	42.0	53.1	263	523
739	0.000	1.000	0.146	0.0663	143	47.7	60.3	298	594
832	0.000	1.000	0.129	0.0747	161	53.8	67.9	336	669
945	0.000	1.000	0.114	0.0848	183	61.0	77.1	382	760
1100	0.000	1.000	0.0978	0.0988	213	71.1	89.8	444	885
1230	0.000	1.000	0.0877	0.110	238	79.3	100	496	985
1400	0.000	1.000	0.0771	0.125	271	90.3	114	565	1120
1580	0.000	1.000	0.0682	0.142	306	102	129	638	1270
1770	0.000	1.000	0.0610	0.159	342	114	144	713	1420
1990	0.000	1.000	0.0541	0.179	386	129	163	805	1610
2280	0.000	1.000	0.0472	0.205	442	147	186	922	1830
2550	0.000	1.000	0.0422	0.229	495	165	208	1030	2050
2870	0.000	1.000	0.0376	0.257	556	185	234	1160	2310
3260	0.000	1.000	0.033	0.293	632	211	266	1320	2620
3680	0.000	1.000	0.0293	0.330	712	237	300	1480	2960
4220	0.000	1.000	0.0255	0.379	818	273	344	1710	3390
4700	0.000	1.000	0.0229	0.422	911	304	384	1900	3780
5310	0.000	1.000	0.0203	0.477	1030	343	433	2150	4270
5970	0.002	0.998	0.0181	0.536	1160	385	487	2420	4800
6760	0.006	0.994	0.0159	0.607	1310	437	552	2730	5440

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	6m	un-	Host Plug	
Depth, meters:	576.09	stressed	1425psi	na
Klinkenberg Permeability, md:		0.002	0.0157	-
Permeability to Air, md:		0.011	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.018	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

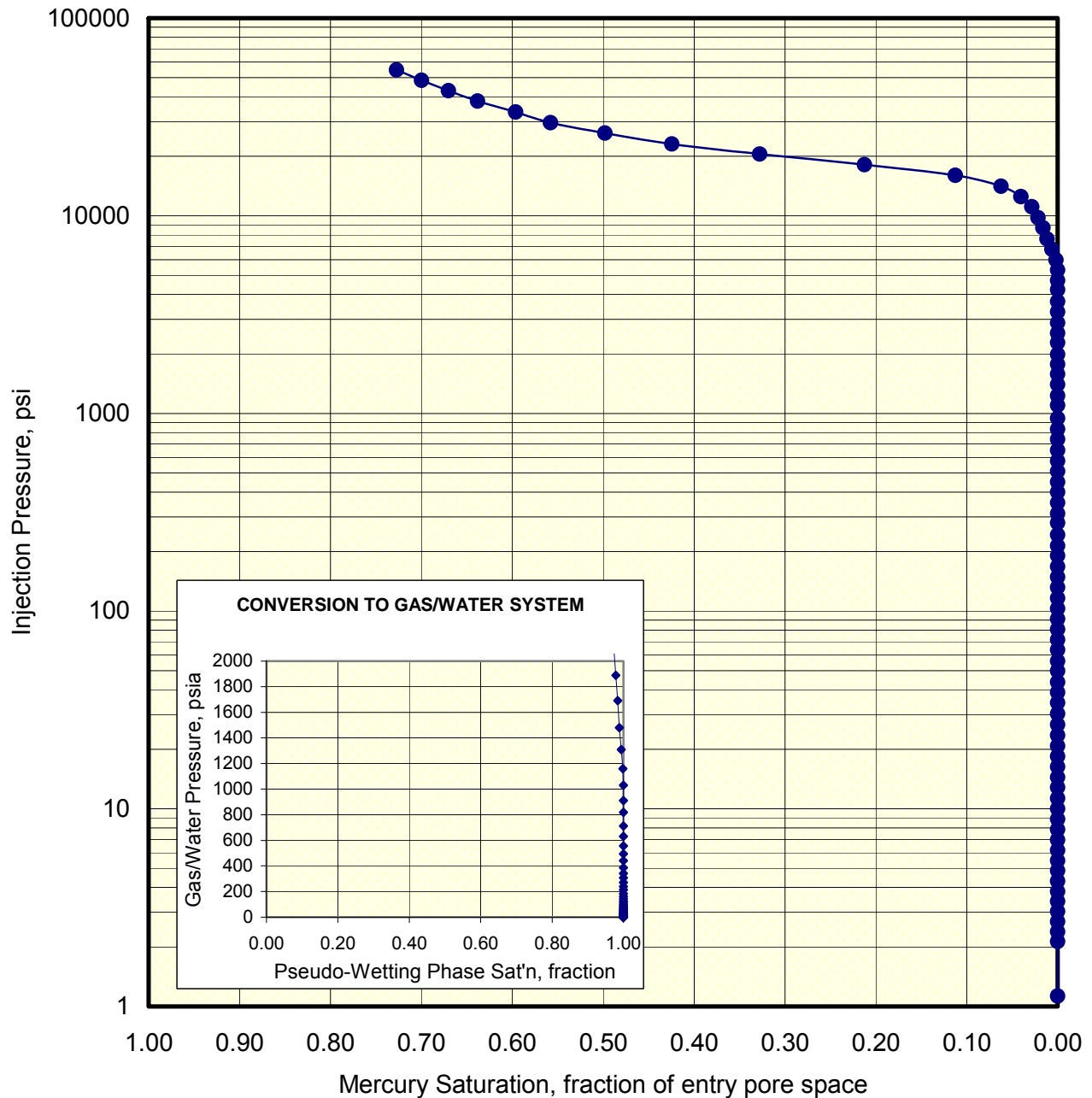
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.012	0.988	0.0141	0.686	1480	494	624	3090	6150
8700	0.016	0.984	0.0124	0.78	1690	562	709	3520	6990
9770	0.022	0.978	0.0110	0.877	1890	631	797	3940	7850
11100	0.029	0.971	0.00975	0.992	2140	714	902	4460	8890
12500	0.040	0.960	0.00862	1.12	2420	807	1020	5050	10000
14100	0.062	0.938	0.00762	1.27	2740	914	1150	5710	11300
16000	0.112	0.888	0.00674	1.43	3100	1030	1300	6460	12800
18100	0.212	0.788	0.00595	1.63	3510	1170	1480	7320	14600
20500	0.328	0.672	0.00526	1.84	3970	1320	1670	8280	16500
23100	0.425	0.575	0.00466	2.08	4480	1490	1890	9340	18600
26200	0.498	0.502	0.00412	2.35	5070	1690	2130	10600	21000
29600	0.558	0.442	0.00364	2.66	5740	1910	2420	12000	23800
33500	0.596	0.404	0.00322	3.01	6490	2160	2730	13500	26900
38000	0.638	0.362	0.00284	3.41	7360	2450	3100	15300	30500
42900	0.670	0.330	0.00251	3.85	8320	2770	3500	17400	34500
48400	0.700	0.300	0.00223	4.35	9380	3130	3950	19600	38900
54700	0.727	0.273	0.00197	4.91	10600	3540	4460	22100	43900

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	6m	un-stressed	Host Plug	
Depth, meters:	576.09		1425psi	na
Klinkenberg Permeability, md:		0.002	0.0157	-
Permeability to Air, md:		0.011	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.018	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

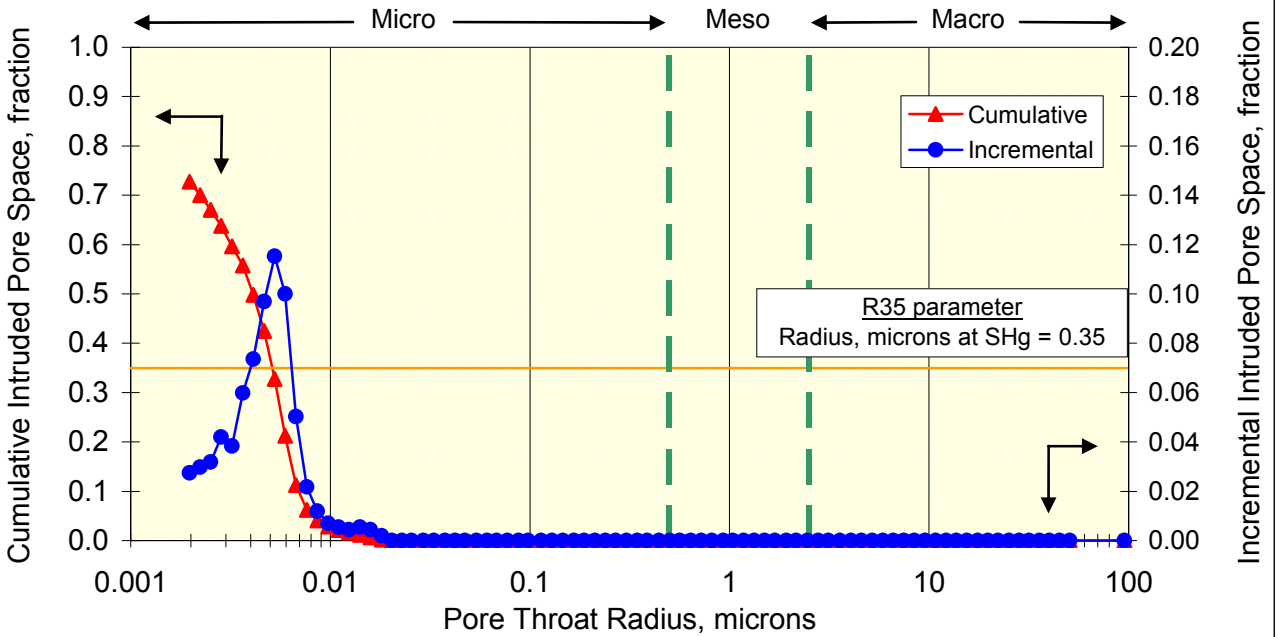
MERCURY INJECTION



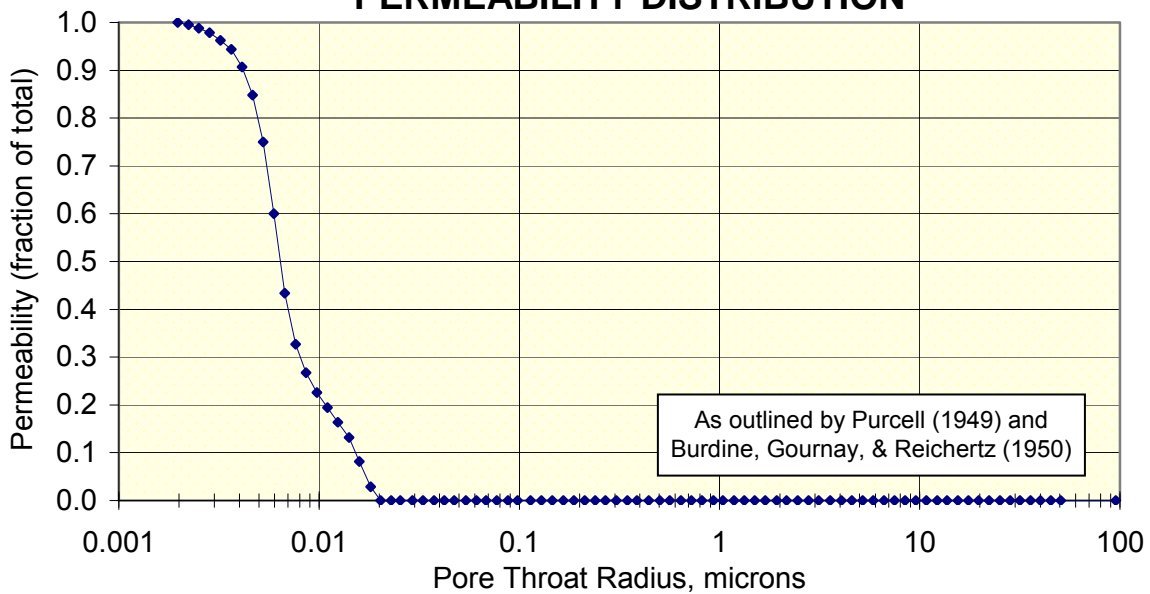
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	6m	un-	Host Plug	
Depth, meters:	576.09	stressed	1425psi	na
Klinkenberg Permeability, md:	0.002	0.0157	-	-
Permeability to Air, md:	0.011	-	-	-
Swanson Permeability, md:	0.0002	-	-	-
Total Porosity, fraction:	0.084	0.018	-	-
maximum Sb/Pc, fraction:	0.0002			
R35, microns:	0.0051			
R50 (median pore throat radius):	0.0041			

PORE THROAT RADIUS DISTRIBUTION



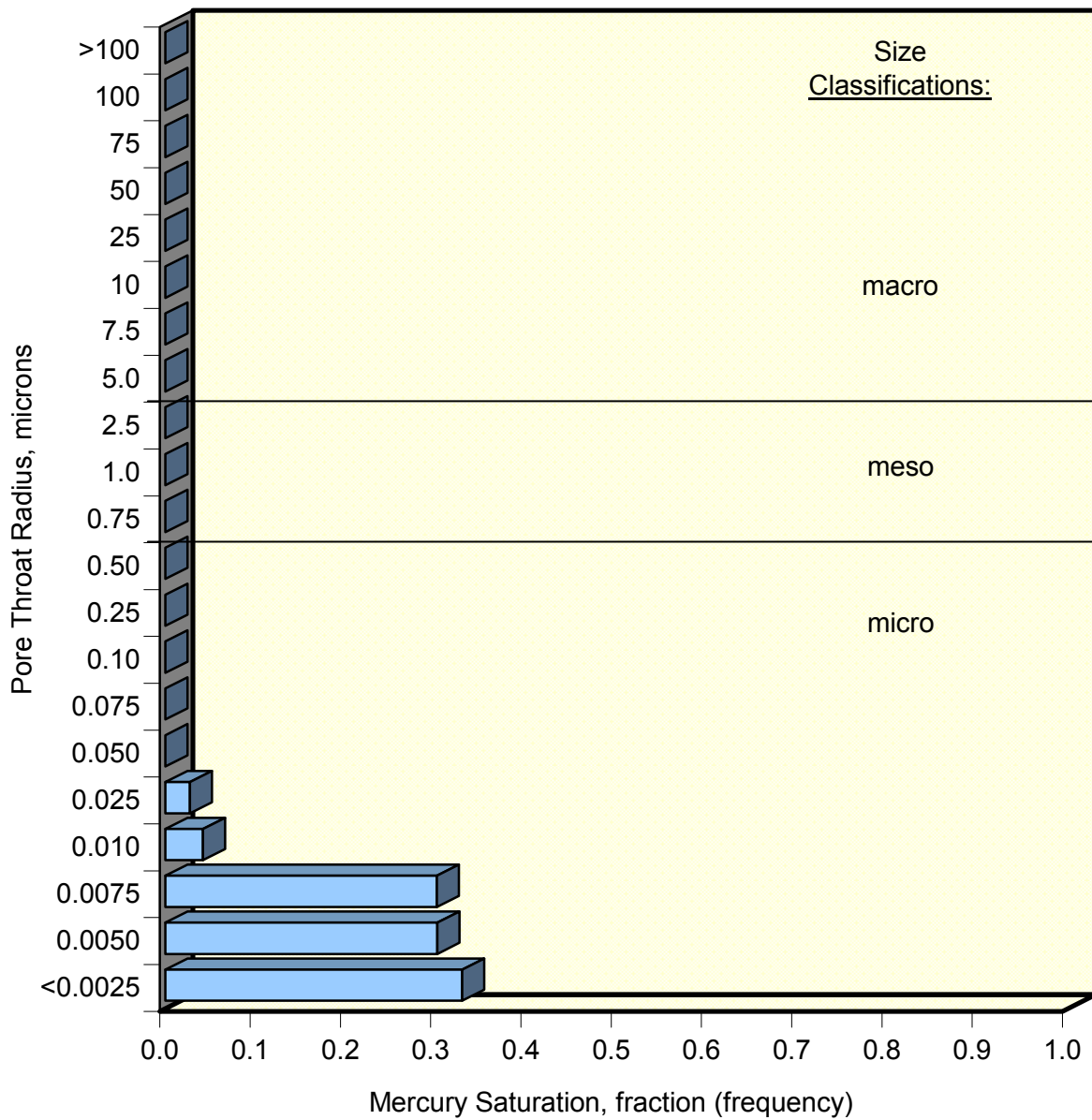
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	6m	un-stressed	Host Plug	
Depth, meters:	576.09		1425psi	na
Klinkenberg Permeability, md:		0.002	0.0157	-
Permeability to Air, md:		0.011	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.018	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	7m	un-	Host Plug	
Depth, meters:	596.09	stressed	1475psi	na
Klinkenberg Permeability, md:		0.006	0.167	-
Permeability to Air, md:		0.021	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.063	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0055		
R50 (median pore throat radius):		0.0043		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.19	0.000	1.000	90.5	0.000185	0.231	0.0769	0.0971	0.482	0.957
2.19	0.000	1.000	49.2	0.000341	0.424	0.141	0.179	0.884	1.76
2.45	0.000	1.000	44.0	0.000382	0.475	0.158	0.200	0.991	1.97
2.76	0.000	1.000	39.0	0.000430	0.535	0.178	0.225	1.12	2.22
3.10	0.000	1.000	34.8	0.000483	0.601	0.200	0.253	1.25	2.49
3.48	0.000	1.000	31.0	0.000542	0.674	0.225	0.284	1.41	2.80
3.90	0.000	1.000	27.6	0.000607	0.756	0.252	0.318	1.58	3.13
4.37	0.000	1.000	24.7	0.000681	0.847	0.282	0.357	1.77	3.52
4.92	0.000	1.000	21.9	0.000766	0.953	0.318	0.401	1.99	3.95
5.53	0.000	1.000	19.5	0.000861	1.07	0.357	0.451	2.23	4.44
6.20	0.000	1.000	17.4	0.000966	1.20	0.401	0.506	2.50	4.99
7.00	0.000	1.000	15.4	0.00109	1.36	0.452	0.571	2.84	5.63
7.91	0.000	1.000	13.6	0.00123	1.53	0.511	0.645	3.19	6.35
8.90	0.000	1.000	12.1	0.00139	1.72	0.575	0.726	3.59	7.15
10.0	0.000	1.000	10.7	0.00156	1.95	0.649	0.819	4.07	8.07
11.3	0.000	1.000	9.51	0.00176	2.20	0.732	0.924	4.59	9.10
12.8	0.000	1.000	8.42	0.00199	2.48	0.826	1.04	5.17	10.2
14.4	0.000	1.000	7.47	0.00225	2.80	0.932	1.18	5.84	11.6
16.3	0.000	1.000	6.60	0.00254	3.16	1.05	1.33	6.59	13.1
18.5	0.000	1.000	5.84	0.00287	3.58	1.19	1.51	7.47	14.9
20.8	0.000	1.000	5.17	0.00324	4.04	1.35	1.70	8.43	16.7
23.5	0.000	1.000	4.58	0.00366	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.00414	5.15	1.72	2.17	10.7	21.4
30.5	0.000	1.000	3.53	0.00475	5.91	1.97	2.49	12.3	24.5
34.4	0.000	1.000	3.13	0.00535	6.66	2.22	2.80	13.9	27.6
38.6	0.000	1.000	2.79	0.00602	7.49	2.5	3.15	15.6	31.0
45.4	0.000	1.000	2.37	0.00707	8.80	2.93	3.70	18.4	36.5
49.7	0.000	1.000	2.17	0.00774	9.63	3.21	4.05	20.1	39.9
55.8	0.000	1.000	1.93	0.00869	10.8	3.60	4.55	22.5	44.8
63.2	0.000	1.000	1.70	0.00985	12.3	4.08	5.16	25.7	50.8
71.3	0.000	1.000	1.51	0.0111	13.8	4.61	5.82	28.8	57.3
80.5	0.000	1.000	1.34	0.0125	15.6	5.20	6.57	32.5	64.7
91.3	0.000	1.000	1.18	0.0142	17.7	5.90	7.45	36.9	73.4
103	0.000	1.000	1.05	0.0160	20.0	6.65	8.40	41.7	82.8

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	7m	un-	Host Plug	
Depth, meters:	596.09	stressed	1475psi	na
Klinkenberg Permeability, md:		0.006	0.167	-
Permeability to Air, md:		0.021	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.063	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0055		
R50 (median pore throat radius):		0.0043		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
118	0.000	1.000	0.912	0.0184	22.9	7.63	9.64	47.8	95.0
132	0.000	1.000	0.815	0.0206	25.6	8.54	10.8	53.4	106
149	0.000	1.000	0.723	0.0232	28.9	9.62	12.2	60.3	120
169	0.000	1.000	0.637	0.0263	32.8	10.9	13.8	68.4	136
191	0.000	1.000	0.565	0.0297	37.0	12.3	15.6	77.2	154
215	0.000	1.000	0.501	0.0335	41.7	13.9	17.6	87.0	173
242	0.000	1.000	0.444	0.0378	47.0	15.7	19.8	98.0	195
276	0.000	1.000	0.391	0.0429	53.4	17.8	22.5	111	222
313	0.000	1.000	0.345	0.0487	60.6	20.2	25.5	126	251
353	0.000	1.000	0.305	0.0550	68.4	22.8	28.8	143	284
402	0.000	1.000	0.268	0.0625	77.8	25.9	32.8	162	323
449	0.000	1.000	0.240	0.0700	87.0	29.0	36.6	181	361
509	0.000	1.000	0.212	0.0793	98.7	32.9	41.6	206	410
574	0.000	1.000	0.188	0.0895	111	37.1	46.9	231	462
653	0.000	1.000	0.165	0.102	127	42.2	53.3	265	525
736	0.000	1.000	0.146	0.115	143	47.6	60.1	298	592
835	0.000	1.000	0.129	0.130	162	54.0	68.2	338	672
941	0.000	1.000	0.115	0.147	182	60.8	76.8	380	757
1080	0.000	1.000	0.0997	0.168	209	69.8	88.1	436	868
1220	0.000	1.000	0.0882	0.190	237	78.9	99.6	494	981
1370	0.000	1.000	0.0785	0.214	266	88.6	112	555	1100
1550	0.000	1.000	0.0695	0.242	301	100	127	628	1250
1740	0.000	1.000	0.0618	0.272	338	113	142	705	1400
1970	0.000	1.000	0.0546	0.307	382	127	161	797	1590
2250	0.000	1.000	0.0479	0.350	436	145	183	909	1800
2530	0.000	1.000	0.0426	0.394	490	163	206	1020	2030
2860	0.000	1.000	0.0377	0.445	554	185	233	1160	2300
3220	0.000	1.000	0.0334	0.502	625	208	263	1300	2590
3640	0.000	1.000	0.0296	0.568	706	235	297	1470	2930
4170	0.000	1.000	0.0258	0.649	808	269	340	1690	3350
4670	0.000	1.000	0.0231	0.727	905	302	381	1890	3750
5280	0.004	0.996	0.0204	0.823	1020	341	431	2130	4250
5970	0.008	0.992	0.0180	0.930	1160	386	487	2420	4800
6750	0.012	0.988	0.0160	1.05	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	7m	un-	Host Plug	
Depth, meters:	596.09	stressed	1475psi	na
Klinkenberg Permeability, md:		0.006	0.167	-
Permeability to Air, md:		0.021	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.063	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0055		
R50 (median pore throat radius):		0.0043		

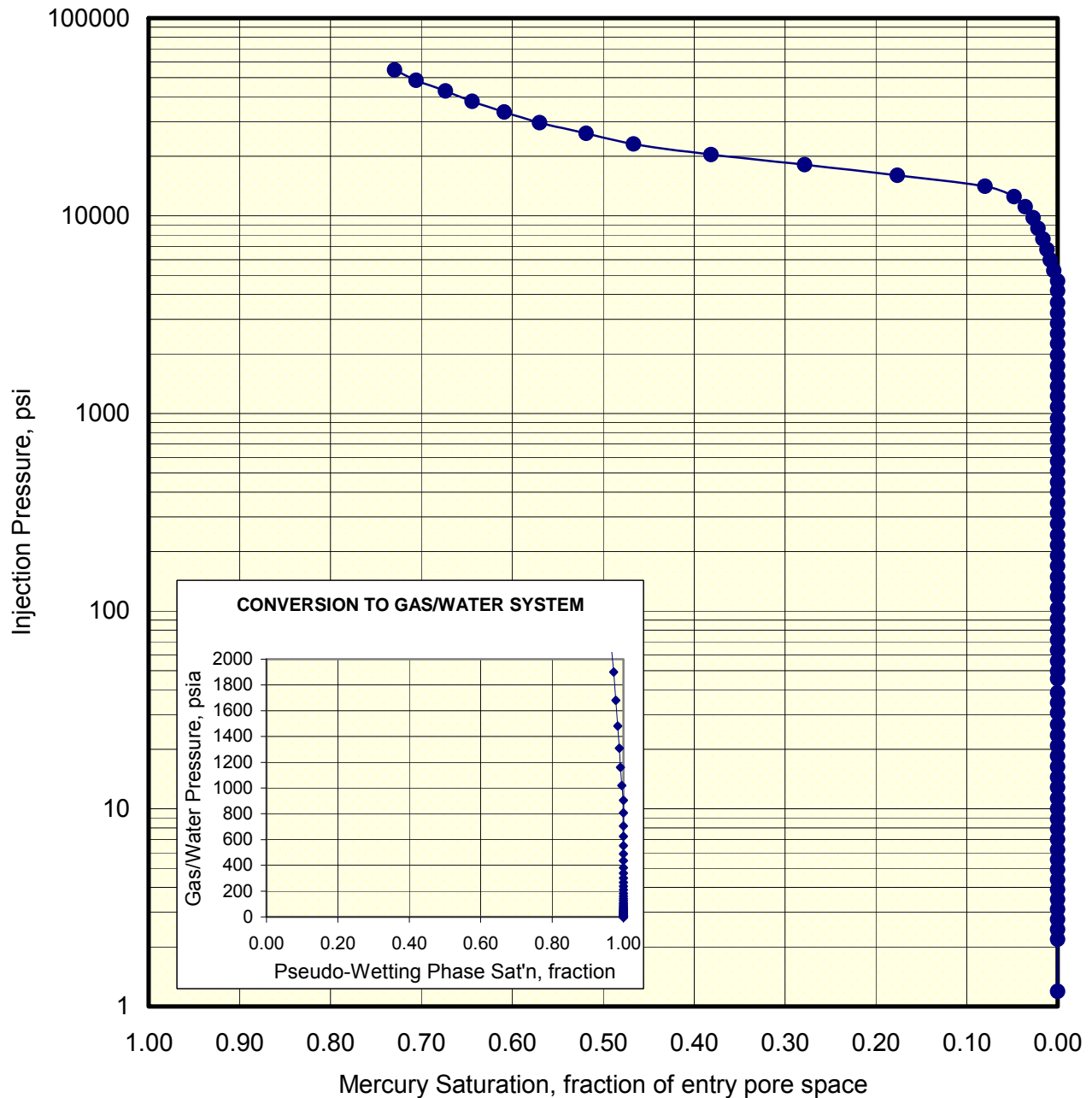
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.016	0.984	0.0141	1.19	1480	493	622	3090	6130
8650	0.022	0.978	0.0125	1.35	1680	559	706	3500	6960
9780	0.027	0.973	0.0110	1.52	1900	632	798	3960	7860
11100	0.036	0.964	0.00974	1.72	2140	715	903	4460	8900
12500	0.048	0.952	0.00862	1.95	2420	807	1020	5050	10000
14100	0.080	0.920	0.00763	2.20	2740	912	1150	5710	11300
16000	0.176	0.824	0.00674	2.49	3100	1030	1300	6460	12800
18100	0.278	0.722	0.00595	2.82	3510	1170	1480	7320	14600
20400	0.381	0.619	0.00527	3.18	3960	1320	1670	8260	16500
23100	0.467	0.533	0.00465	3.61	4490	1500	1890	9360	18600
26100	0.519	0.481	0.00412	4.07	5070	1690	2130	10600	21000
29600	0.570	0.430	0.00364	4.61	5730	1910	2410	11900	23700
33500	0.609	0.391	0.00321	5.22	6500	2170	2740	13600	27000
37900	0.644	0.356	0.00284	5.91	7350	2450	3090	15300	30400
42800	0.674	0.326	0.00252	6.67	8290	2760	3490	17300	34400
48500	0.706	0.294	0.00222	7.56	9400	3130	3960	19600	39000
54700	0.729	0.271	0.00197	8.52	10600	3540	4470	22100	44000

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	7m	un-	Host Plug	
Depth, meters:	596.09	stressed	1475psi	na
Klinkenberg Permeability, md:	0.006	0.006	0.167	-
Permeability to Air, md:	0.021	0.021	-	-
Swanson Permeability, md:	0.0002	0.0002	-	-
Total Porosity, fraction:	0.084	0.084	0.063	-
maximum Sb/Pc, fraction:	0.0002	0.0002		
R35, microns:	0.0055	0.0055		
R50 (median pore throat radius):	0.0043	0.0043		

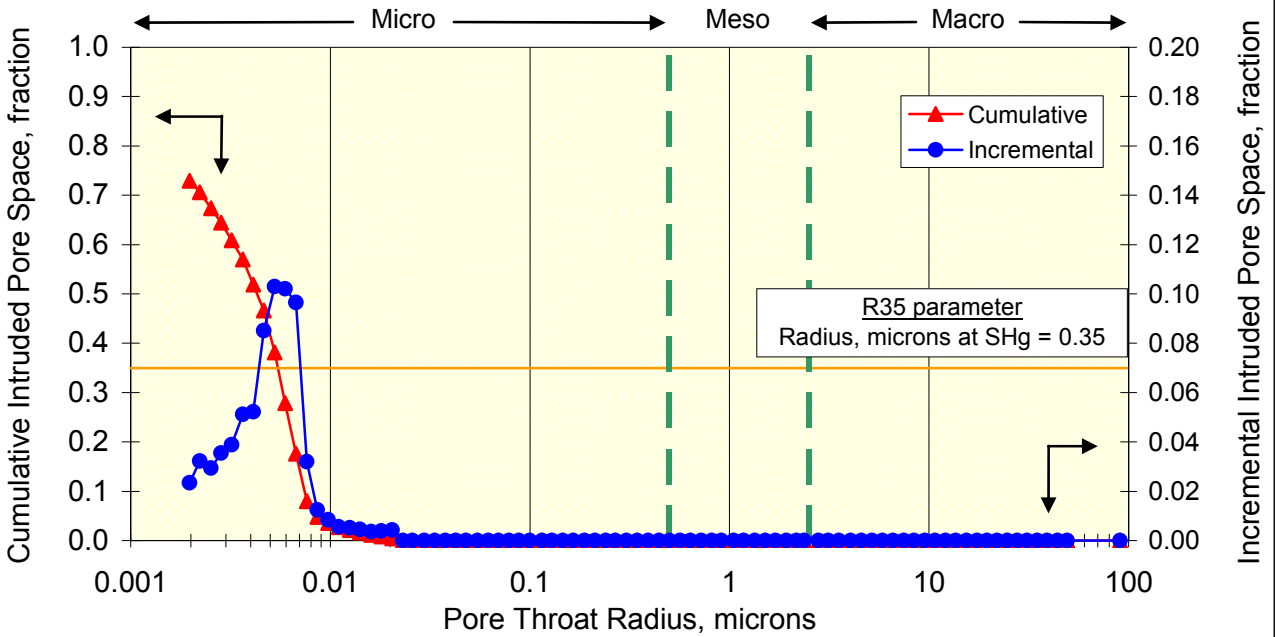
MERCURY INJECTION



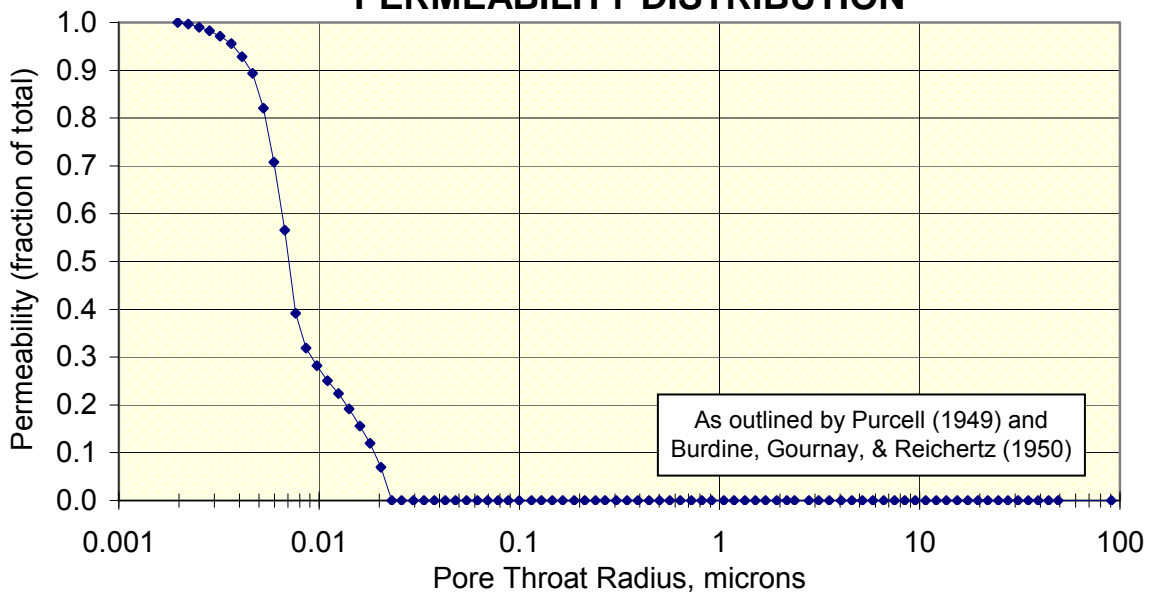
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	7m	un-	Host Plug	
Depth, meters:	596.09	stressed	1475psi	na
Klinkenberg Permeability, md:	0.006	0.006	0.167	-
Permeability to Air, md:	0.021	0.021	-	-
Swanson Permeability, md:	0.0002	0.0002	-	-
Total Porosity, fraction:	0.084	0.084	0.063	-
maximum Sb/Pc, fraction:	0.0002	0.0002		
R35, microns:	0.0055	0.0055		
R50 (median pore throat radius):	0.0043	0.0043		

PORE THROAT RADIUS DISTRIBUTION



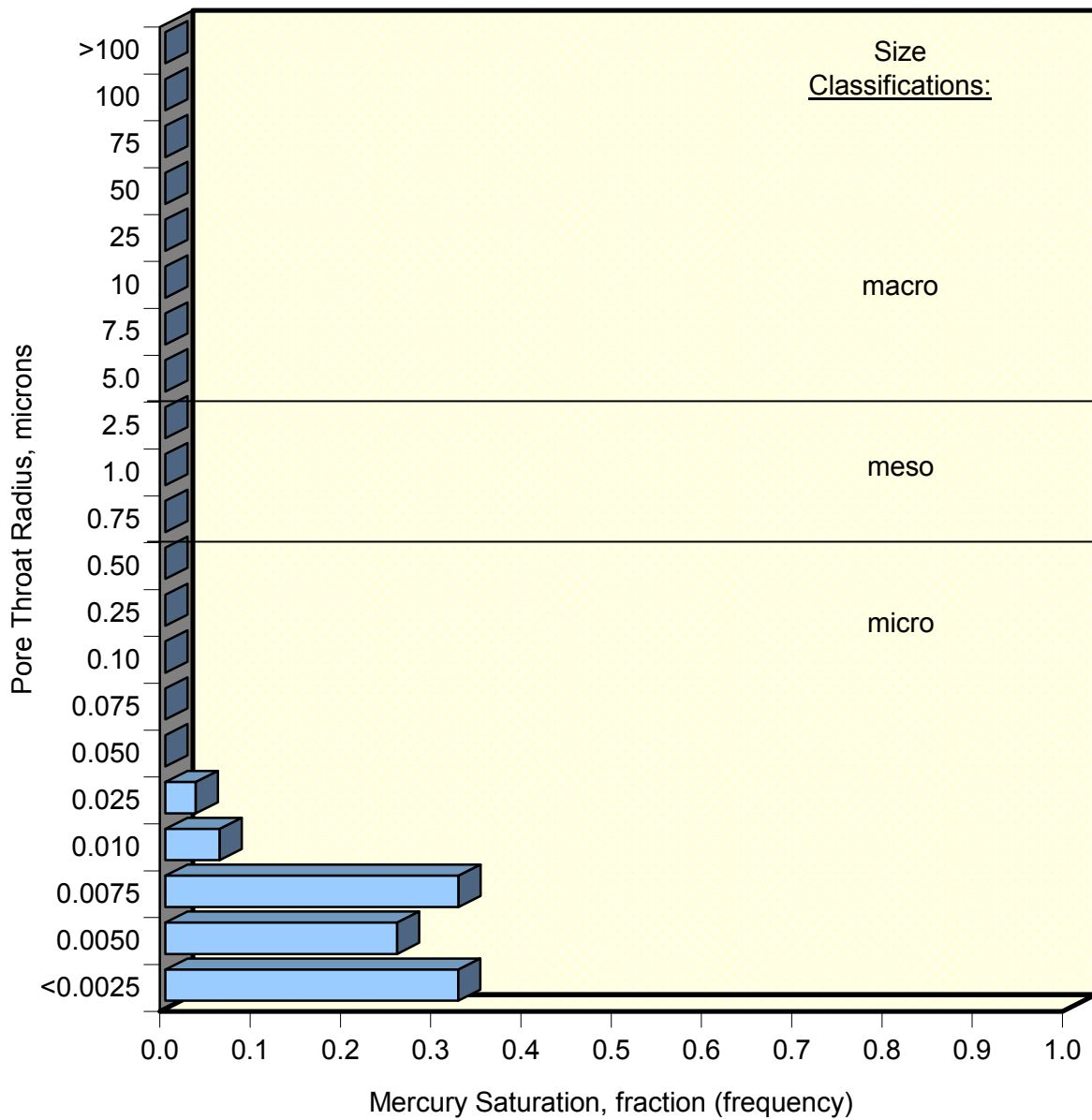
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	7m	un-stressed	Host Plug	
Depth, meters:	596.09		1475psi	na
Klinkenberg Permeability, md:		0.006	0.167	-
Permeability to Air, md:		0.021	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.084	0.063	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0055		
R50 (median pore throat radius):		0.0043		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	8m	un-	Host Plug	
Depth, meters:	613.93	stressed	1500psi	na
Klinkenberg Permeability, md:		0.329	0.616	-
Permeability to Air, md:		0.477	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.086	0.070	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.10	0.000	1.000	97.9	0.00126	0.213	0.0711	0.0897	0.444	0.884
2.10	0.000	1.000	51.3	0.00240	0.407	0.136	0.171	0.849	1.68
2.36	0.000	1.000	45.7	0.00269	0.457	0.152	0.193	0.953	1.90
2.66	0.000	1.000	40.5	0.00304	0.515	0.172	0.217	1.07	2.14
3.01	0.000	1.000	35.8	0.00344	0.583	0.194	0.246	1.22	2.42
3.38	0.000	1.000	31.9	0.00386	0.655	0.218	0.276	1.37	2.72
3.80	0.000	1.000	28.4	0.00434	0.736	0.245	0.310	1.53	3.05
4.28	0.000	1.000	25.2	0.00489	0.829	0.276	0.349	1.73	3.44
4.83	0.000	1.000	22.3	0.00551	0.936	0.312	0.394	1.95	3.88
5.44	0.000	1.000	19.8	0.00621	1.05	0.351	0.444	2.19	4.37
6.15	0.000	1.000	17.5	0.00702	1.19	0.397	0.502	2.48	4.95
6.92	0.000	1.000	15.6	0.00790	1.34	0.447	0.565	2.79	5.57
7.81	0.000	1.000	13.8	0.00892	1.51	0.505	0.637	3.15	6.28
8.84	0.000	1.000	12.2	0.0101	1.71	0.571	0.721	3.57	7.10
9.99	0.000	1.000	10.8	0.0114	1.94	0.645	0.815	4.05	8.03
11.3	0.000	1.000	9.56	0.0129	2.18	0.728	0.919	4.55	9.05
12.7	0.000	1.000	8.46	0.0145	2.47	0.822	1.04	5.15	10.2
14.4	0.000	1.000	7.48	0.0164	2.79	0.93	1.17	5.82	11.5
16.3	0.000	1.000	6.63	0.0186	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.86	0.0210	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.0237	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.59	0.0268	4.55	1.52	1.91	9.49	18.8
26.6	0.000	1.000	4.06	0.0303	5.15	1.72	2.17	10.7	21.4
29.9	0.000	1.000	3.60	0.0342	5.80	1.93	2.44	12.1	24.0
34.5	0.000	1.000	3.12	0.0394	6.68	2.23	2.81	13.9	27.7
38.7	0.000	1.000	2.78	0.0442	7.51	2.50	3.16	15.7	31.1
43.7	0.000	1.000	2.46	0.0499	8.48	2.83	3.57	17.7	35.2
49.7	0.000	1.000	2.17	0.0567	9.63	3.21	4.05	20.1	39.9
55.8	0.000	1.000	1.93	0.0637	10.8	3.61	4.55	22.5	44.8
62.9	0.000	1.000	1.71	0.0718	12.2	4.06	5.13	25.4	50.5
71.1	0.000	1.000	1.52	0.0811	13.8	4.59	5.80	28.8	57.1
80.7	0.000	1.000	1.33	0.0921	15.6	5.21	6.58	32.5	64.8
91.2	0.000	1.000	1.18	0.104	17.7	5.89	7.44	36.9	73.3
103	0.000	1.000	1.05	0.117	19.9	6.63	8.38	41.5	82.6

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	8m	un-	Host Plug	
Depth, meters:	613.93	stressed	1500psi	na
Klinkenberg Permeability, md:		0.329	0.616	-
Permeability to Air, md:		0.477	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.086	0.070	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.927	0.133	22.5	7.51	9.48	46.9	93.4
132	0.000	1.000	0.817	0.151	25.6	8.52	10.8	53.4	106
149	0.000	1.000	0.724	0.170	28.8	9.62	12.1	60.1	119
169	0.000	1.000	0.639	0.192	32.7	10.9	13.8	68.2	136
191	0.000	1.000	0.565	0.218	37.0	12.3	15.6	77.2	154
215	0.000	1.000	0.502	0.245	41.6	13.9	17.5	86.8	172
242	0.000	1.000	0.445	0.276	46.9	15.6	19.8	97.8	195
280	0.000	1.000	0.384	0.320	54.3	18.1	22.9	113	226
316	0.000	1.000	0.341	0.361	61.3	20.4	25.8	128	254
352	0.000	1.000	0.306	0.402	68.3	22.8	28.7	142	283
403	0.000	1.000	0.268	0.460	78.0	26.0	32.9	163	324
449	0.000	1.000	0.240	0.513	87.1	29.0	36.7	182	362
511	0.000	1.000	0.211	0.583	98.9	33.0	41.7	206	411
578	0.000	1.000	0.186	0.660	112	37.3	47.2	234	465
649	0.000	1.000	0.166	0.741	126	41.9	53.0	263	522
739	0.000	1.000	0.146	0.844	143	47.8	60.3	298	594
839	0.000	1.000	0.128	0.958	163	54.2	68.4	340	674
944	0.000	1.000	0.114	1.08	183	61.0	77.1	382	760
1100	0.000	1.000	0.0978	1.26	213	71.1	89.9	444	886
1230	0.000	1.000	0.0874	1.41	239	79.6	101	498	995
1380	0.000	1.000	0.0779	1.58	268	89.4	113	559	1110
1560	0.000	1.000	0.0690	1.78	303	101	127	632	1250
1760	0.000	1.000	0.0613	2.01	341	114	143	711	1410
1990	0.000	1.000	0.0541	2.27	386	129	163	805	1610
2270	0.000	1.000	0.0475	2.59	440	147	185	918	1820
2550	0.000	1.000	0.0422	2.91	494	165	208	1030	2050
2860	0.000	1.000	0.0376	3.27	555	185	233	1160	2300
3260	0.000	1.000	0.0330	3.73	633	211	266	1320	2620
3660	0.000	1.000	0.0294	4.18	710	237	299	1480	2950
4200	0.000	1.000	0.0257	4.79	814	271	343	1700	3380
4700	0.003	0.997	0.0229	5.37	911	304	383	1900	3770
5270	0.006	0.994	0.0204	6.02	1020	341	430	2130	4240
5980	0.010	0.990	0.0180	6.82	1160	386	488	2420	4810
6750	0.013	0.987	0.0160	7.71	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	8m	un-	Host Plug	
Depth, meters:	613.93	stressed	1500psi	na
Klinkenberg Permeability, md:		0.329	0.616	-
Permeability to Air, md:		0.477	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.086	0.070	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

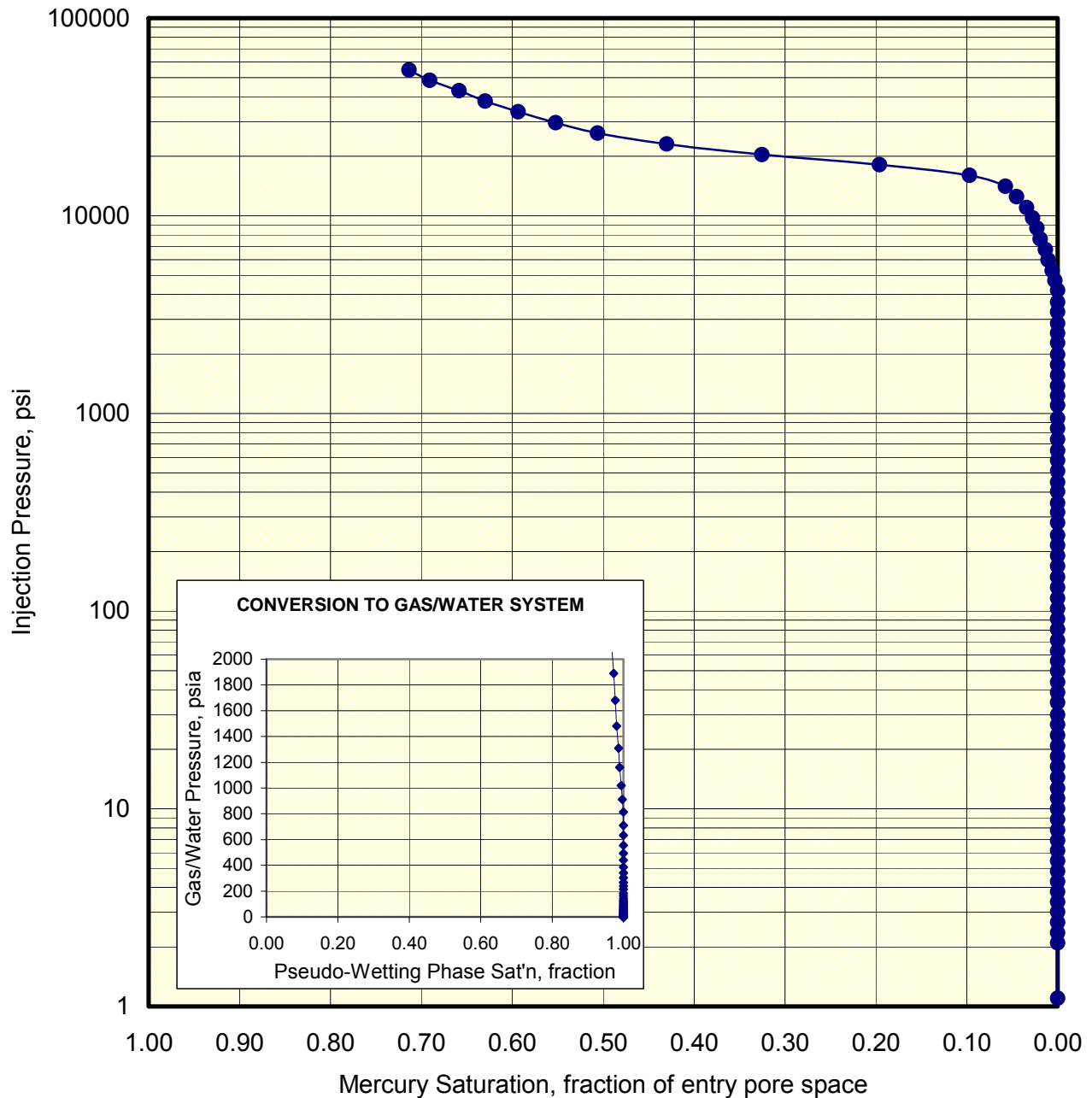
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.019	0.981	0.0141	8.73	1480	494	624	3090	6150
8670	0.023	0.977	0.0124	9.89	1680	560	707	3500	6970
9760	0.028	0.972	0.0110	11.1	1890	630	796	3940	7840
11000	0.034	0.966	0.00976	12.6	2140	713	901	4460	8880
12500	0.045	0.955	0.00860	14.3	2430	810	1020	5070	10000
14100	0.058	0.942	0.00762	16.1	2740	913	1150	5710	11300
16000	0.097	0.903	0.00674	18.2	3100	1030	1300	6460	12800
18100	0.196	0.804	0.00594	20.7	3510	1170	1480	7320	14600
20400	0.325	0.675	0.00527	23.3	3960	1320	1670	8260	16500
23100	0.430	0.570	0.00466	26.4	4480	1490	1890	9340	18600
26200	0.506	0.494	0.00412	29.9	5070	1690	2130	10600	21000
29600	0.552	0.448	0.00364	33.8	5730	1910	2410	11900	23700
33600	0.594	0.406	0.00321	38.4	6510	2170	2740	13600	27000
38000	0.630	0.370	0.00284	43.3	7360	2450	3100	15300	30500
42900	0.659	0.341	0.00251	48.9	8310	2770	3500	17300	34500
48500	0.691	0.309	0.00222	55.4	9410	3140	3960	19600	39000
54700	0.714	0.286	0.00197	62.5	10600	3540	4470	22100	44000

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	8m	un-	Host Plug	
Depth, meters:	613.93	stressed	1500psi	na
Klinkenberg Permeability, md:		0.329	0.616	-
Permeability to Air, md:		0.477	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.086	0.070	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

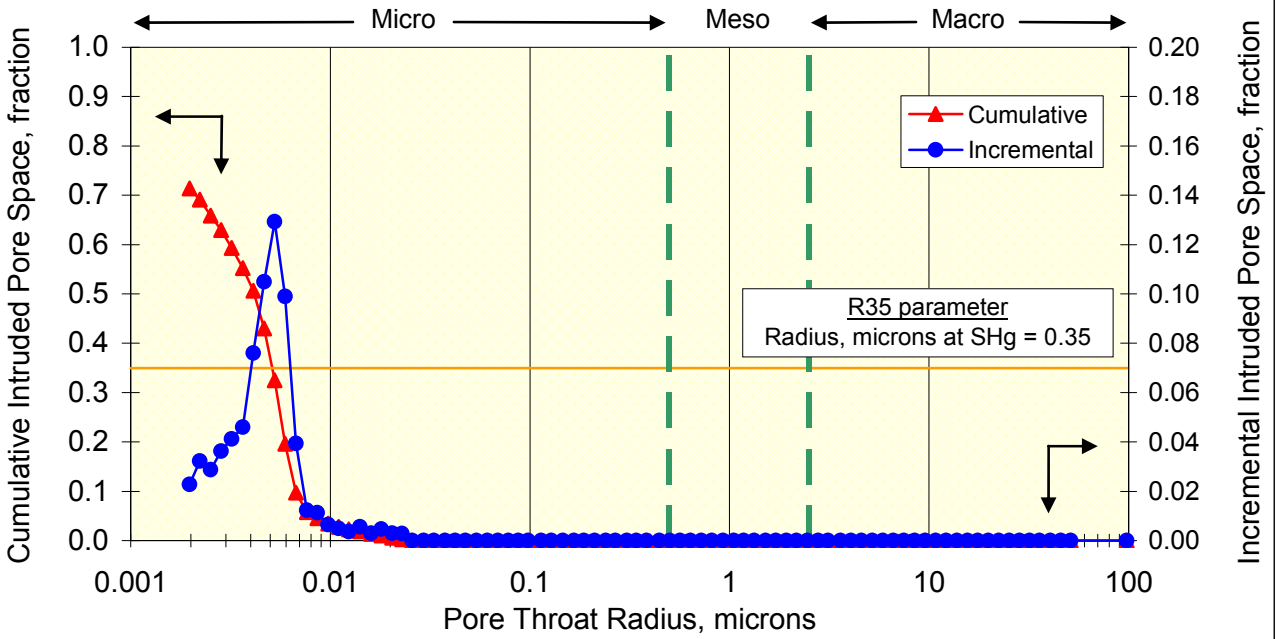
MERCURY INJECTION



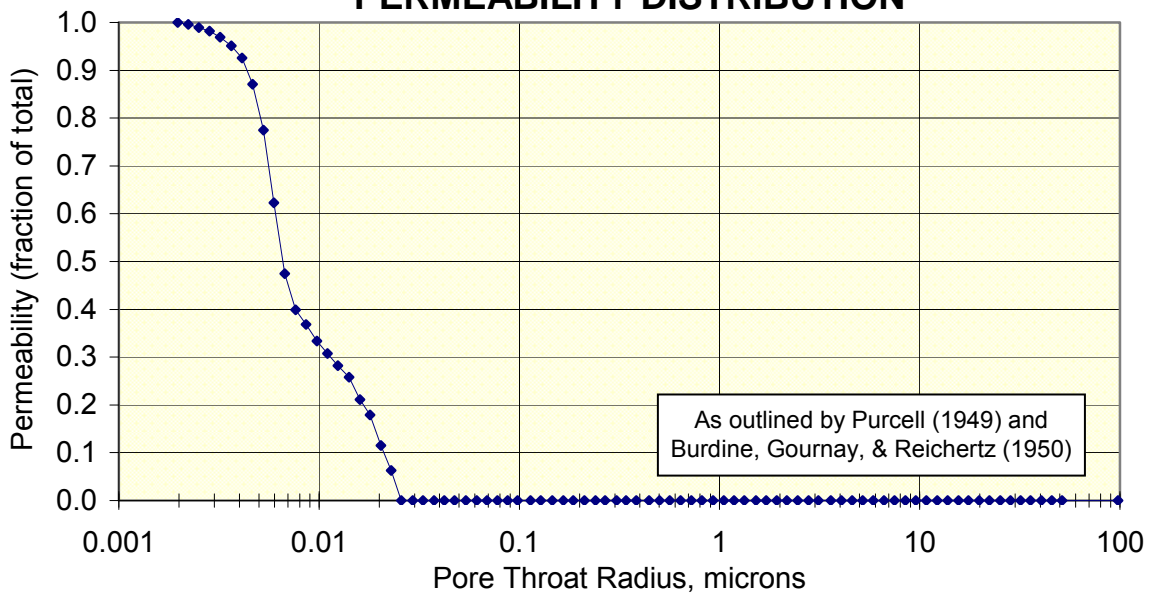
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	8m	un-	Host Plug	
Depth, meters:	613.93	stressed	1500psi	na
Klinkenberg Permeability, md:	0.329	0.616	-	-
Permeability to Air, md:	0.477	-	-	-
Swanson Permeability, md:	0.0002	-	-	-
Total Porosity, fraction:	0.086	0.070	-	-
maximum Sb/Pc, fraction:	0.0002			
R35, microns:	0.0051			
R50 (median pore throat radius):	0.0041			

PORE THROAT RADIUS DISTRIBUTION



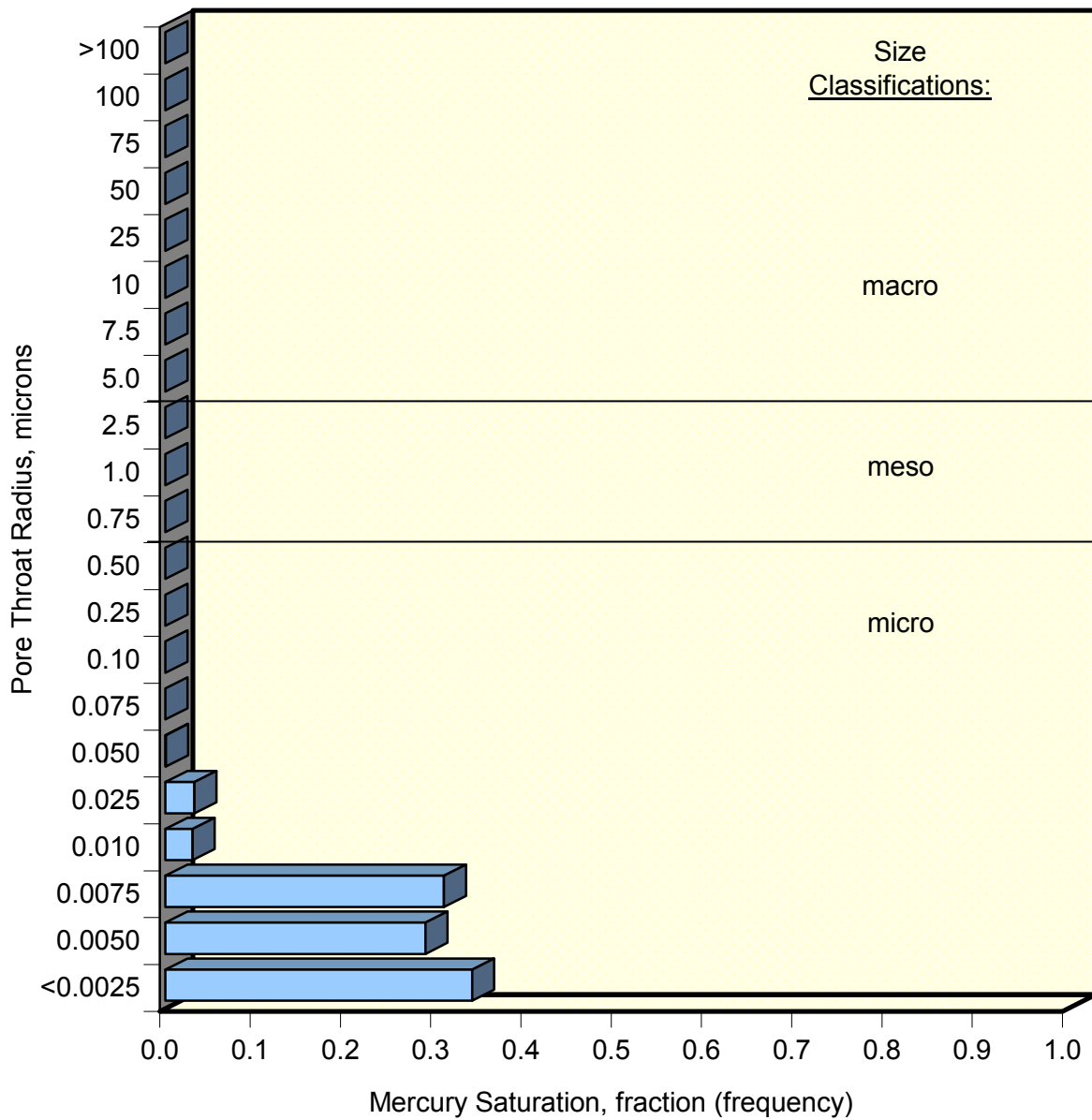
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	8m	un-stressed	Host Plug	
Depth, meters:	613.93		1500psi	na
Klinkenberg Permeability, md:		0.329	0.616	-
Permeability to Air, md:		0.477	-	-
Swanson Permeability, md:		0.0002	-	-
Total Porosity, fraction:		0.086	0.070	-
maximum Sb/Pc, fraction:		0.0002		
R35, microns:		0.0051		
R50 (median pore throat radius):		0.0041		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	9m	un-	Host Plug	
Depth, meters:	633.41	stressed	1550psi	na
Klinkenberg Permeability, md:		n/a	0.00082	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.057	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0032		

J values calculated using the Swanson permeability

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.10	0.000	1.000	97.9	0.000023	0.213	0.0711	0.0897	0.444	0.884
2.10	0.000	1.000	51.3	0.000045	0.407	0.136	0.171	0.849	1.68
2.36	0.000	1.000	45.7	0.000050	0.457	0.152	0.193	0.953	1.90
2.66	0.000	1.000	40.5	0.000057	0.515	0.172	0.217	1.07	2.14
3.01	0.000	1.000	35.8	0.000064	0.583	0.194	0.246	1.22	2.42
3.38	0.000	1.000	31.9	0.000072	0.655	0.218	0.276	1.37	2.72
3.80	0.000	1.000	28.4	0.000081	0.736	0.245	0.310	1.53	3.05
4.28	0.000	1.000	25.2	0.000091	0.829	0.276	0.349	1.73	3.44
4.83	0.000	1.000	22.3	0.000103	0.936	0.312	0.394	1.95	3.88
5.44	0.000	1.000	19.8	0.000116	1.05	0.351	0.444	2.19	4.37
6.15	0.000	1.000	17.5	0.000131	1.19	0.397	0.502	2.48	4.95
6.92	0.000	1.000	15.6	0.000147	1.34	0.447	0.565	2.79	5.57
7.81	0.000	1.000	13.8	0.000166	1.51	0.505	0.637	3.15	6.28
8.84	0.000	1.000	12.2	0.000188	1.71	0.571	0.721	3.57	7.10
9.99	0.000	1.000	10.8	0.000212	1.94	0.645	0.815	4.05	8.03
11.3	0.000	1.000	9.56	0.000240	2.18	0.728	0.919	4.55	9.05
12.7	0.000	1.000	8.46	0.000271	2.47	0.822	1.04	5.15	10.2
14.4	0.000	1.000	7.48	0.000306	2.79	0.93	1.17	5.82	11.5
16.3	0.000	1.000	6.63	0.000345	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.86	0.000391	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.000442	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.59	0.000499	4.55	1.52	1.91	9.49	18.8
26.6	0.000	1.000	4.06	0.000565	5.15	1.72	2.17	10.7	21.4
29.9	0.000	1.000	3.60	0.000636	5.79	1.93	2.44	12.1	24.0
34.5	0.000	1.000	3.13	0.000733	6.68	2.23	2.81	13.9	27.7
38.7	0.000	1.000	2.78	0.000823	7.51	2.5	3.16	15.7	31.1
43.7	0.000	1.000	2.46	0.000930	8.47	2.82	3.57	17.7	35.2
49.7	0.000	1.000	2.17	0.00106	9.63	3.21	4.05	20.1	39.9
55.8	0.000	1.000	1.93	0.00119	10.8	3.61	4.55	22.5	44.8
62.9	0.000	1.000	1.71	0.00134	12.2	4.06	5.13	25.4	50.5
71.1	0.000	1.000	1.52	0.00151	13.8	4.59	5.80	28.8	57.1
80.7	0.000	1.000	1.34	0.00172	15.6	5.21	6.58	32.5	64.8
91.2	0.000	1.000	1.18	0.00194	17.7	5.89	7.44	36.9	73.3
103	0.000	1.000	1.05	0.00218	19.9	6.63	8.38	41.5	82.6

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	9m	un-	Host Plug	
Depth, meters:	633.41	stressed	1550psi	na
Klinkenberg Permeability, md:		n/a	0.00082	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.057	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0032		

J values calculated using the Swanson permeability

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.927	0.00247	22.5	7.51	9.48	46.9	93.4
132	0.000	1.000	0.817	0.00280	25.6	8.52	10.8	53.4	106
149	0.000	1.000	0.724	0.00316	28.8	9.61	12.1	60.1	119
169	0.000	1.000	0.639	0.00358	32.7	10.9	13.7	68.2	135
191	0.000	1.000	0.565	0.00406	37.0	12.3	15.6	77.2	154
215	0.000	1.000	0.502	0.00457	41.6	13.9	17.5	86.8	172
242	0.000	1.000	0.445	0.00515	46.9	15.6	19.8	97.8	195
280	0.000	1.000	0.384	0.00596	54.3	18.1	22.9	113	226
316	0.000	1.000	0.341	0.00673	61.3	20.4	25.8	128	254
352	0.000	1.000	0.306	0.00749	68.3	22.8	28.7	142	283
403	0.000	1.000	0.268	0.00856	78.0	26.0	32.9	163	324
449	0.000	1.000	0.240	0.00955	87.1	29.0	36.7	182	362
511	0.000	1.000	0.211	0.0109	98.9	33.0	41.6	206	410
578	0.000	1.000	0.186	0.0123	112	37.3	47.2	234	465
649	0.000	1.000	0.166	0.0138	126	41.9	53.0	263	522
739	0.000	1.000	0.146	0.0157	143	47.8	60.3	298	594
839	0.000	1.000	0.128	0.0178	163	54.2	68.4	340	674
944	0.000	1.000	0.114	0.0201	183	61.0	77.1	382	760
1100	0.000	1.000	0.0978	0.0234	213	71.1	89.9	444	886
1230	0.000	1.000	0.0874	0.0262	239	79.6	101	498	995
1380	0.000	1.000	0.0779	0.0294	268	89.4	113	559	1110
1560	0.000	1.000	0.069	0.0332	303	101	127	632	1250
1760	0.000	1.000	0.0613	0.0374	341	114	143	711	1410
1990	0.000	1.000	0.0541	0.0424	386	129	163	805	1610
2270	0.000	1.000	0.0475	0.0482	440	147	185	918	1820
2550	0.000	1.000	0.0422	0.0542	494	165	208	1030	2050
2860	0.000	1.000	0.0376	0.0608	555	185	233	1160	2300
3260	0.000	1.000	0.0330	0.0694	633	211	266	1320	2620
3660	0.000	1.000	0.0294	0.0779	710	237	299	1480	2950
4200	0.000	1.000	0.0257	0.0893	814	271	343	1700	3380
4700	0.000	1.000	0.0229	0.0999	911	304	383	1900	3770
5270	0.003	0.997	0.0204	0.112	1020	341	430	2130	4240
5980	0.007	0.993	0.0180	0.127	1160	386	488	2420	4810
6750	0.010	0.990	0.0160	0.144	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	9m	un-	Host Plug	
Depth, meters:	633.41	stressed	1550psi	na
Klinkenberg Permeability, md:		n/a	0.00082	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.057	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0032		

J values calculated using the Swanson permeability

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

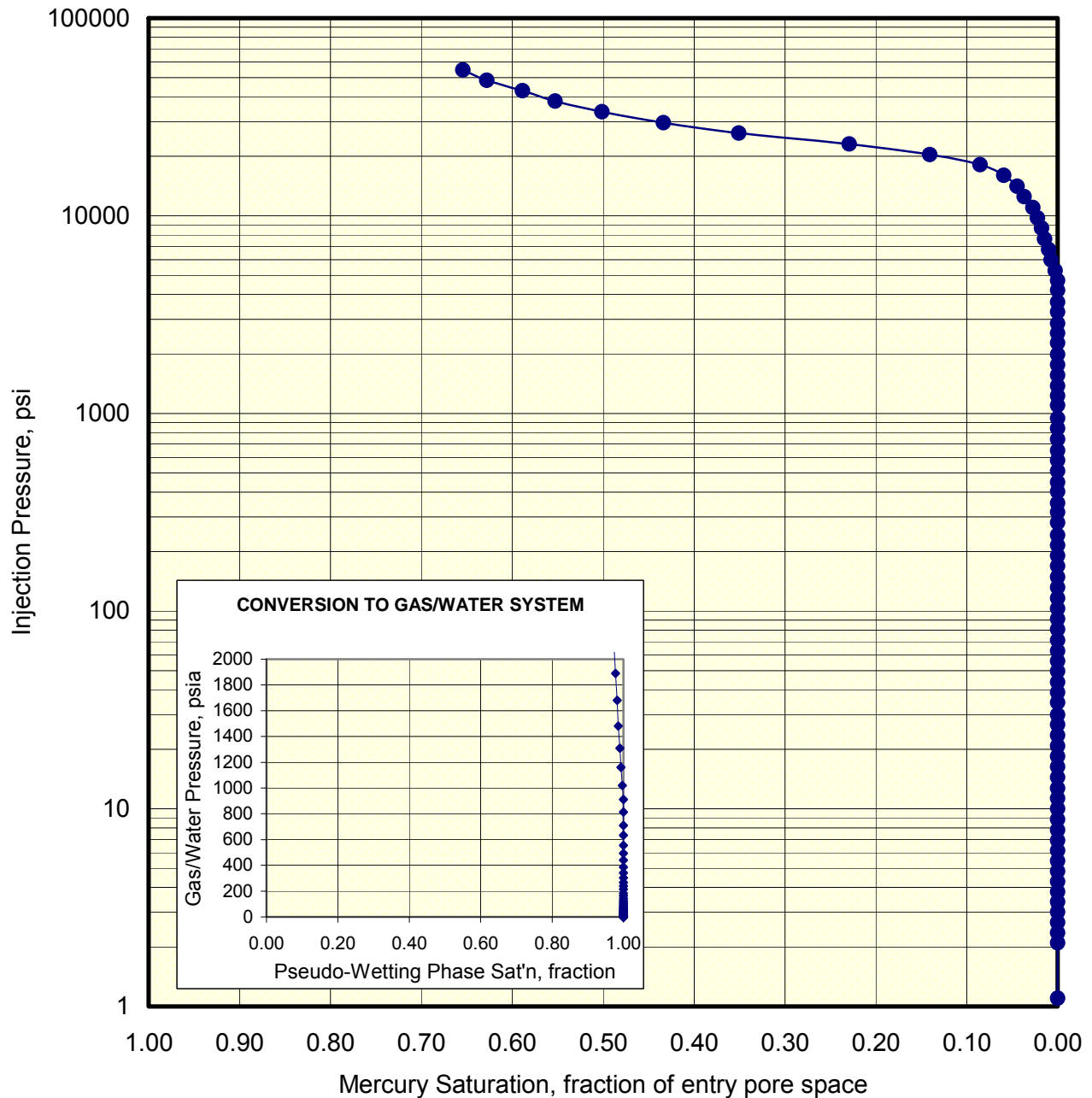
Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.014	0.986	0.0141	0.163	1480	494	624	3090	6150
8670	0.018	0.982	0.0124	0.184	1680	560	707	3500	6970
9760	0.022	0.978	0.0110	0.207	1890	630	796	3940	7840
11000	0.027	0.973	0.00976	0.235	2140	713	901	4460	8880
12500	0.037	0.963	0.00860	0.266	2430	810	1020	5070	10000
14100	0.045	0.955	0.00762	0.301	2740	913	1150	5710	11300
16000	0.059	0.941	0.00674	0.340	3100	1030	1300	6460	12800
18100	0.085	0.915	0.00594	0.386	3510	1170	1480	7320	14600
20400	0.141	0.859	0.00527	0.435	3960	1320	1670	8260	16500
23100	0.229	0.771	0.00466	0.492	4480	1490	1890	9340	18600
26200	0.351	0.649	0.00412	0.556	5070	1690	2130	10600	21000
29600	0.434	0.566	0.00364	0.629	5730	1910	2410	11900	23700
33600	0.501	0.499	0.00321	0.714	6510	2170	2740	13600	27000
38000	0.553	0.447	0.00284	0.807	7360	2450	3100	15300	30500
42900	0.589	0.411	0.00251	0.911	8310	2770	3500	17300	34500
48500	0.628	0.372	0.00222	1.03	9410	3140	3960	19600	39000
54700	0.654	0.346	0.00197	1.16	10600	3540	4470	22100	44000

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	9m	un-	Host Plug	
Depth, meters:	633.41	stressed	1550psi	na
Klinkenberg Permeability, md:	n/a		0.00082	-
Permeability to Air, md:	n/a		-	-
Swanson Permeability, md:	0.0001		-	-
Total Porosity, fraction:	0.075		0.057	-
maximum Sb/Pc, fraction:	0.0001			
R35, microns:	0.0041			
R50 (median pore throat radius):	0.0032			

J values calculated using the Swanson permeability

MERCURY INJECTION

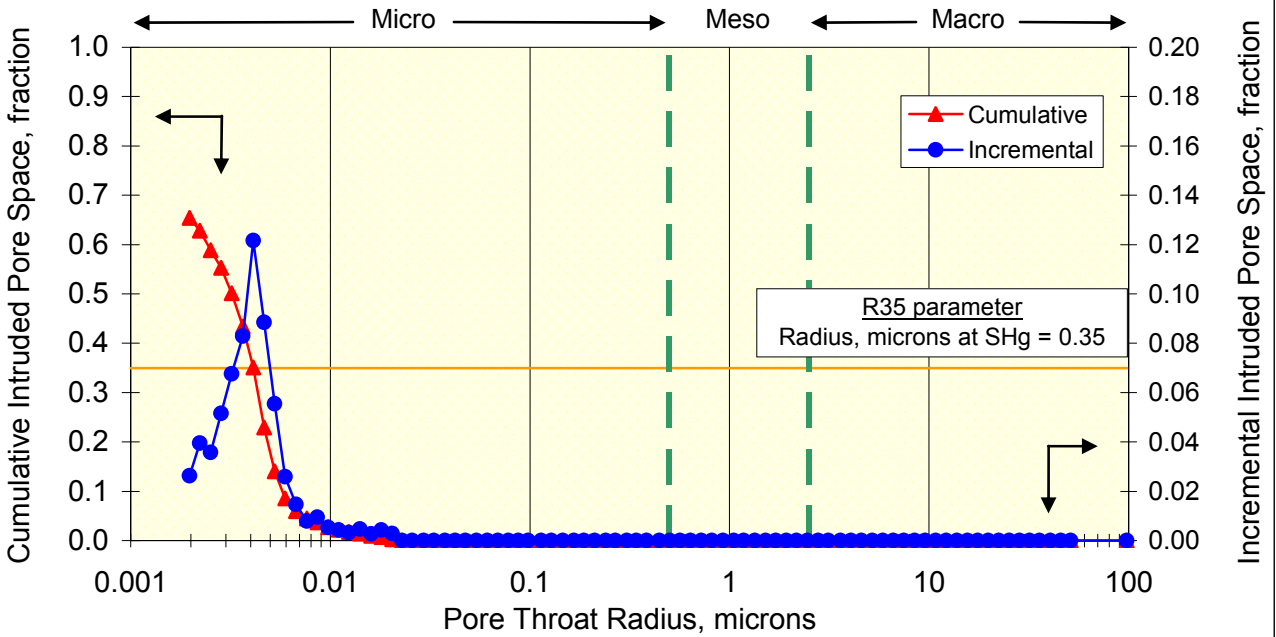


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

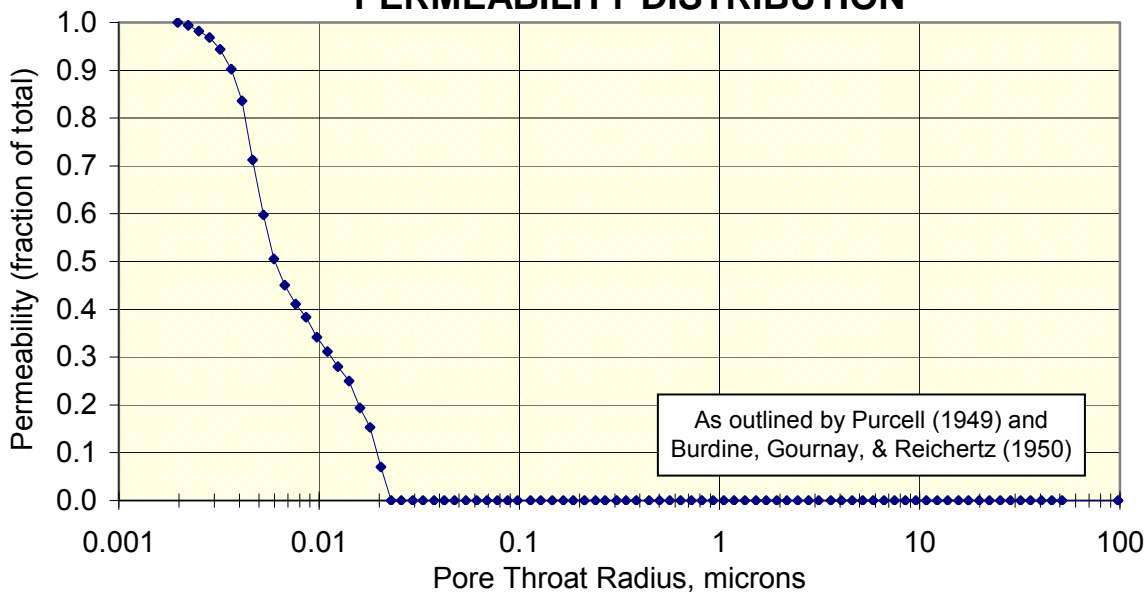
Sample:	9m	un-stressed	Host Plug	
Depth, meters:	633.41		1550psi	na
Klinkenberg Permeability, md:		n/a	0.00082	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.057	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0032		

J values calculated using the Swanson permeability

PORE THROAT RADIUS DISTRIBUTION



PERMEABILITY DISTRIBUTION

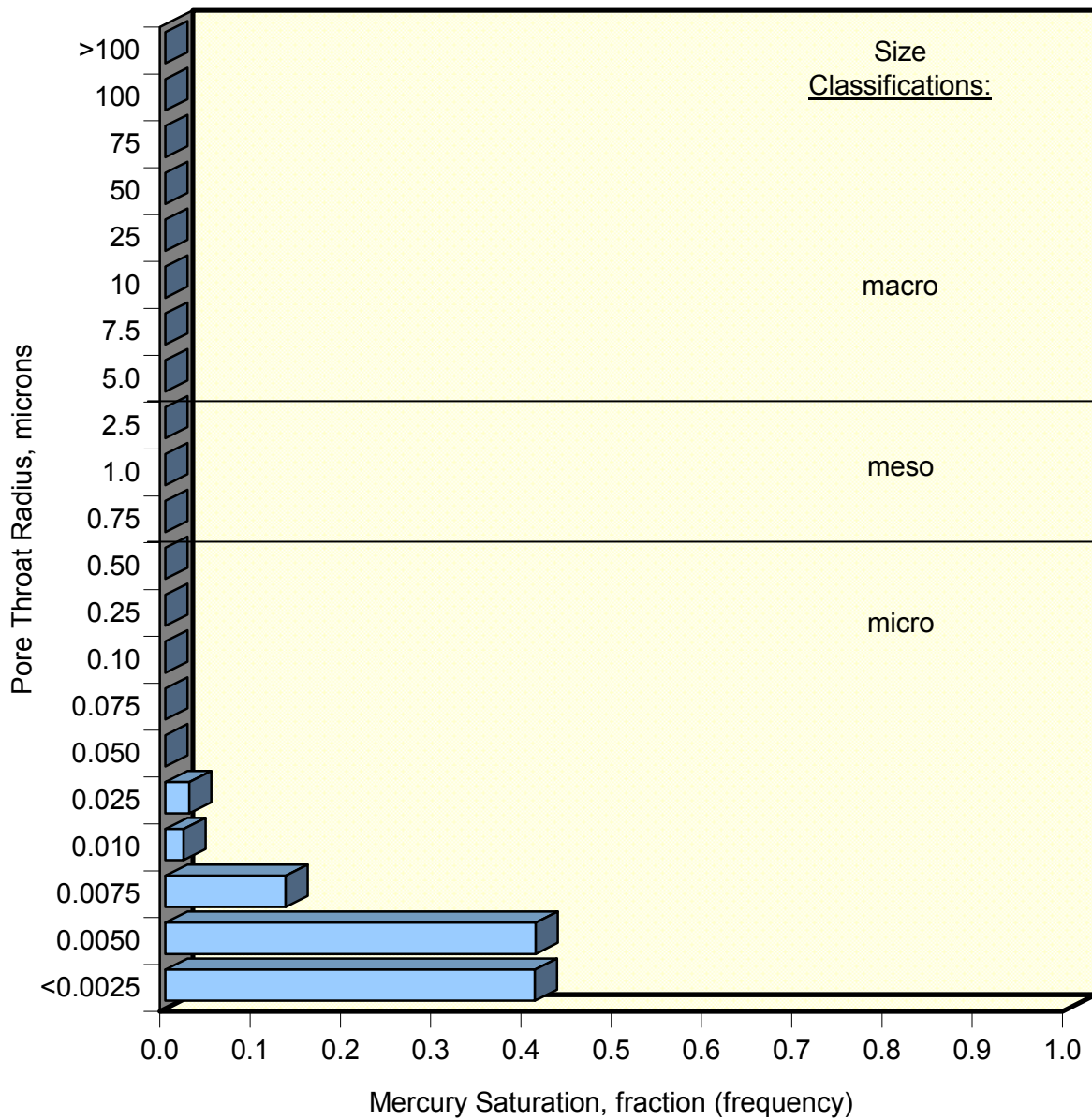


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	9m	un-	Host Plug	
Depth, meters:	633.41	stressed	1550psi	na
Klinkenberg Permeability, md:		n/a	0.00082	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.057	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0041		
R50 (median pore throat radius):		0.0032		

J values calculated using the Swanson permeability

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	10m	un-	Host Plug	
Depth, meters:	650.12	stressed	1600psi	na
Klinkenberg Permeability, md:		0.236	0.889	-
Permeability to Air, md:		0.378	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.054	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0024		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.19	0.000	1.000	90.5	0.00123	0.231	0.0769	0.0971	0.482	0.957
2.19	0.000	1.000	49.2	0.00227	0.424	0.141	0.179	0.884	1.76
2.45	0.000	1.000	44.0	0.00254	0.475	0.158	0.200	0.991	1.97
2.76	0.000	1.000	39.0	0.00286	0.535	0.178	0.225	1.12	2.22
3.10	0.000	1.000	34.8	0.00321	0.601	0.200	0.253	1.25	2.49
3.48	0.000	1.000	31.0	0.00360	0.674	0.225	0.284	1.41	2.80
3.90	0.000	1.000	27.6	0.00404	0.756	0.252	0.318	1.58	3.13
4.37	0.000	1.000	24.7	0.00453	0.847	0.282	0.357	1.77	3.52
4.92	0.000	1.000	21.9	0.00510	0.953	0.318	0.401	1.99	3.95
5.53	0.000	1.000	19.5	0.00573	1.07	0.357	0.451	2.23	4.44
6.20	0.000	1.000	17.4	0.00642	1.20	0.401	0.506	2.5	4.99
7.00	0.000	1.000	15.4	0.00725	1.36	0.452	0.571	2.84	5.63
7.91	0.000	1.000	13.6	0.00819	1.53	0.511	0.645	3.19	6.35
8.90	0.000	1.000	12.1	0.00922	1.72	0.575	0.726	3.59	7.15
10.0	0.000	1.000	10.7	0.0104	1.95	0.649	0.819	4.07	8.07
11.3	0.000	1.000	9.51	0.0117	2.20	0.732	0.924	4.59	9.10
12.8	0.000	1.000	8.42	0.0132	2.48	0.826	1.04	5.17	10.2
14.4	0.000	1.000	7.47	0.0149	2.80	0.932	1.18	5.84	11.6
16.3	0.000	1.000	6.60	0.0169	3.16	1.05	1.33	6.59	13.1
18.5	0.000	1.000	5.84	0.0191	3.58	1.19	1.51	7.47	14.9
20.8	0.000	1.000	5.17	0.0216	4.04	1.35	1.70	8.43	16.7
23.5	0.000	1.000	4.58	0.0244	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.0275	5.15	1.72	2.17	10.7	21.4
30.5	0.000	1.000	3.53	0.0316	5.91	1.97	2.49	12.3	24.5
34.4	0.000	1.000	3.13	0.0356	6.66	2.22	2.81	13.9	27.7
38.7	0.000	1.000	2.79	0.0400	7.49	2.50	3.15	15.6	31.0
45.4	0.000	1.000	2.37	0.0471	8.80	2.93	3.71	18.4	36.6
49.7	0.000	1.000	2.17	0.0515	9.63	3.21	4.05	20.1	39.9
55.8	0.000	1.000	1.93	0.0578	10.8	3.61	4.55	22.5	44.8
63.3	0.000	1.000	1.70	0.0655	12.3	4.09	5.16	25.7	50.8
71.3	0.000	1.000	1.51	0.0739	13.8	4.61	5.82	28.8	57.3
80.5	0.000	1.000	1.34	0.0834	15.6	5.20	6.57	32.5	64.7
91.4	0.000	1.000	1.18	0.0946	17.7	5.90	7.45	36.9	73.4
103	0.000	1.000	1.05	0.107	20.0	6.66	8.41	41.7	82.9

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	10m	un-	Host Plug	
Depth, meters:	650.12	stressed	1600psi	na
Klinkenberg Permeability, md:		0.236	0.889	-
Permeability to Air, md:		0.378	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.054	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0024		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
118	0.000	1.000	0.911	0.122	22.9	7.64	9.64	47.8	95.0
132	0.000	1.000	0.815	0.137	25.6	8.54	10.8	53.4	106
149	0.000	1.000	0.723	0.154	28.9	9.62	12.2	60.3	120
169	0.000	1.000	0.637	0.175	32.8	10.9	13.8	68.4	136
191	0.000	1.000	0.565	0.198	37.0	12.3	15.6	77.2	154
215	0.000	1.000	0.501	0.223	41.7	13.9	17.6	87.0	173
242	0.000	1.000	0.444	0.251	47.0	15.7	19.8	98.0	195
276	0.000	1.000	0.391	0.286	53.4	17.8	22.5	111	222
313	0.000	1.000	0.345	0.324	60.6	20.2	25.5	126	251
353	0.000	1.000	0.305	0.366	68.4	22.8	28.8	143	284
402	0.000	1.000	0.268	0.416	77.8	25.9	32.8	162	323
449	0.000	1.000	0.240	0.465	87.1	29.0	36.6	182	361
509	0.000	1.000	0.212	0.528	98.7	32.9	41.6	206	410
574	0.000	1.000	0.188	0.595	111	37.1	46.9	231	462
653	0.000	1.000	0.165	0.676	127	42.2	53.3	265	525
736	0.000	1.000	0.146	0.762	143	47.6	60.1	298	592
835	0.000	1.000	0.129	0.865	162	54.0	68.2	338	672
941	0.000	1.000	0.115	0.974	182	60.8	76.8	380	757
1080	0.000	1.000	0.0997	1.12	209	69.8	88.1	436	868
1220	0.000	1.000	0.0882	1.26	237	78.9	99.6	494	981
1370	0.000	1.000	0.0785	1.42	266	88.6	112	555	1100
1550	0.000	1.000	0.0695	1.61	301	100	127	628	1250
1740	0.000	1.000	0.0618	1.81	338	113	142	705	1400
1970	0.000	1.000	0.0546	2.04	382	127	161	797	1590
2250	0.000	1.000	0.0479	2.33	436	145	184	909	1810
2530	0.000	1.000	0.0426	2.62	490	163	206	1020	2030
2860	0.000	1.000	0.0377	2.96	554	185	233	1160	2300
3220	0.000	1.000	0.0334	3.34	625	208	263	1300	2590
3640	0.000	1.000	0.0296	3.78	706	235	297	1470	2930
4170	0.000	1.000	0.0258	4.32	808	269	340	1690	3350
4670	0.000	1.000	0.0231	4.84	905	302	381	1890	3750
5280	0.004	0.996	0.0204	5.47	1020	341	431	2130	4250
5970	0.008	0.992	0.0180	6.18	1160	386	487	2420	4800
6750	0.011	0.989	0.0160	6.99	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	10m	un-	Host Plug	
Depth, meters:	650.12	stressed	1600psi	na
Klinkenberg Permeability, md:		0.236	0.889	-
Permeability to Air, md:		0.378	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.054	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0024		

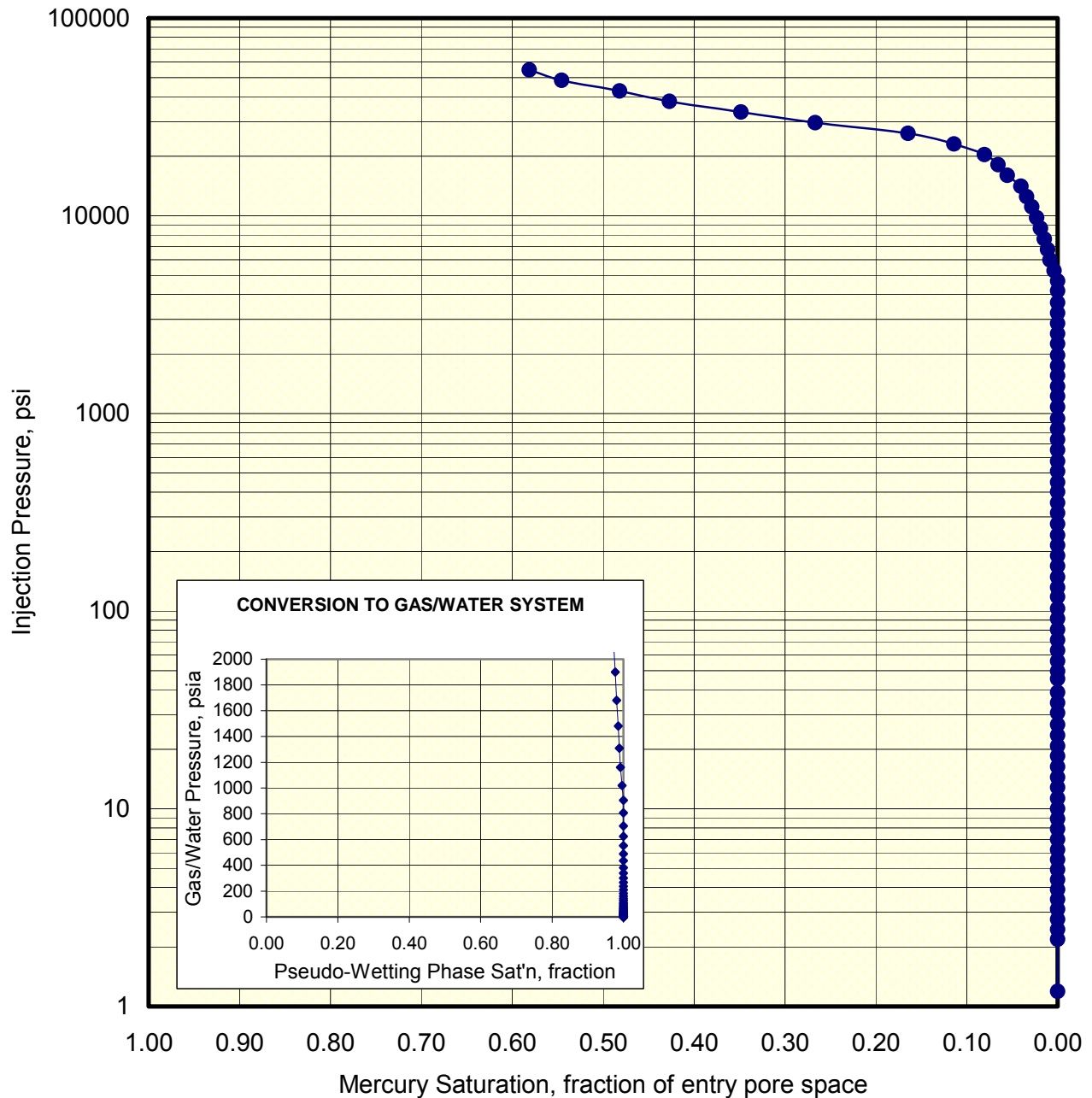
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.015	0.985	0.0141	7.90	1480	493	622	3090	6130
8650	0.019	0.981	0.0125	8.96	1680	559	706	3500	6960
9780	0.023	0.977	0.0110	10.1	1900	632	798	3960	7860
11100	0.028	0.972	0.00974	11.5	2140	715	903	4460	8900
12500	0.034	0.966	0.00862	12.9	2420	807	1020	5050	10000
14100	0.040	0.960	0.00763	14.6	2740	912	1150	5710	11300
16000	0.055	0.945	0.00674	16.6	3100	1030	1300	6460	12800
18100	0.066	0.934	0.00595	18.8	3510	1170	1480	7320	14600
20400	0.081	0.919	0.00527	21.2	3960	1320	1670	8260	16500
23100	0.114	0.886	0.00465	24.0	4490	1500	1890	9360	18600
26100	0.165	0.835	0.00412	27.1	5070	1690	2130	10600	21000
29600	0.267	0.733	0.00364	30.6	5730	1910	2410	11900	23700
33500	0.348	0.652	0.00321	34.7	6500	2170	2740	13600	27000
37900	0.427	0.573	0.00284	39.3	7350	2450	3090	15300	30400
42800	0.482	0.518	0.00252	44.3	8290	2760	3490	17300	34400
48500	0.546	0.454	0.00222	50.3	9400	3130	3960	19600	39000
54700	0.581	0.419	0.00197	56.7	10600	3540	4470	22100	44000

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	10m	un-	Host Plug	
Depth, meters:	650.12	stressed	1600psi	na
Klinkenberg Permeability, md:		0.236	0.889	-
Permeability to Air, md:		0.378	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.054	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0024		

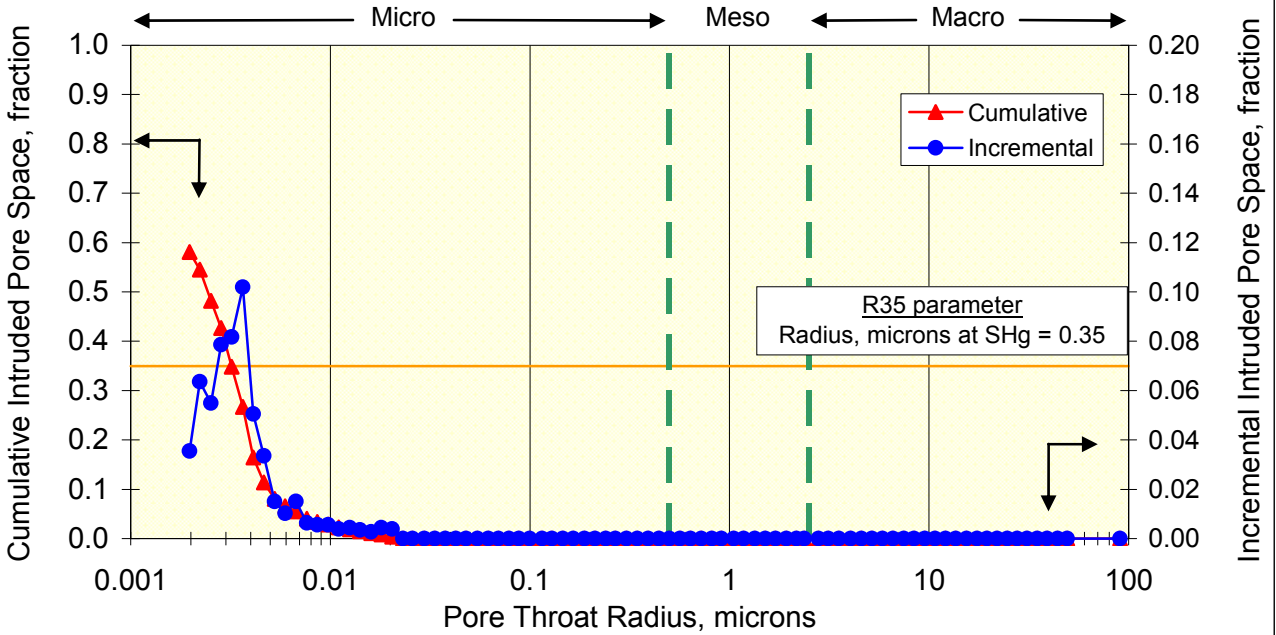
MERCURY INJECTION



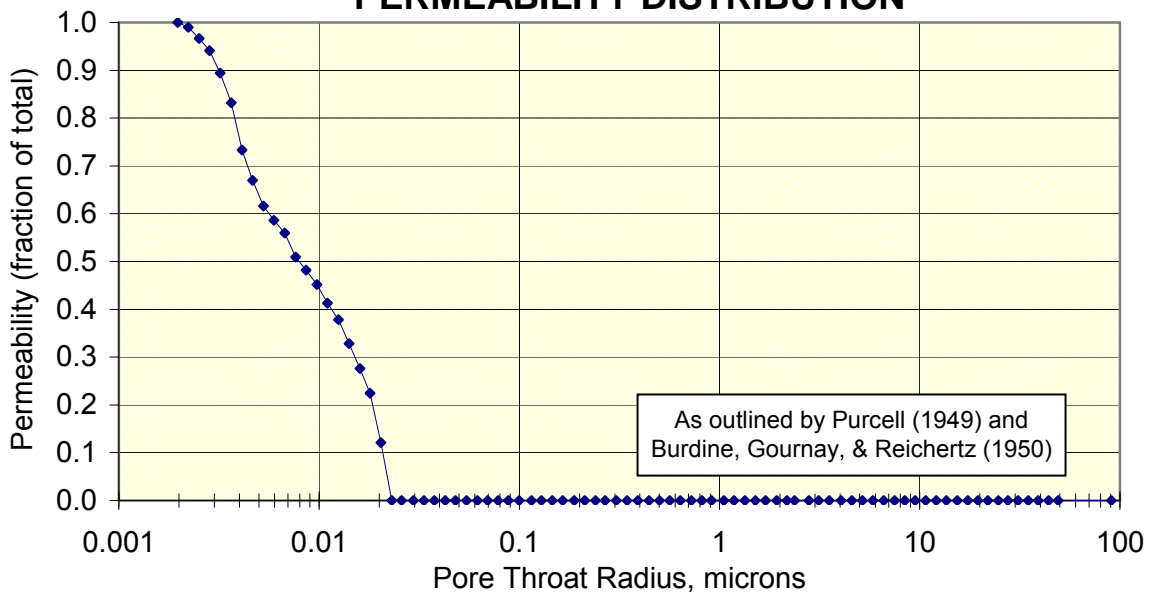
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	10m	un-	Host Plug	
Depth, meters:	650.12	stressed	1600psi	na
Klinkenberg Permeability, md:	0.236	0.236	0.889	-
Permeability to Air, md:	0.378	0.378	-	-
Swanson Permeability, md:	0.0001	0.0001	-	-
Total Porosity, fraction:	0.075	0.075	0.054	-
maximum Sb/Pc, fraction:	0.0001	0.0001		
R35, microns:	0.0032	0.0032		
R50 (median pore throat radius):	0.0024	0.0024		

PORE THROAT RADIUS DISTRIBUTION



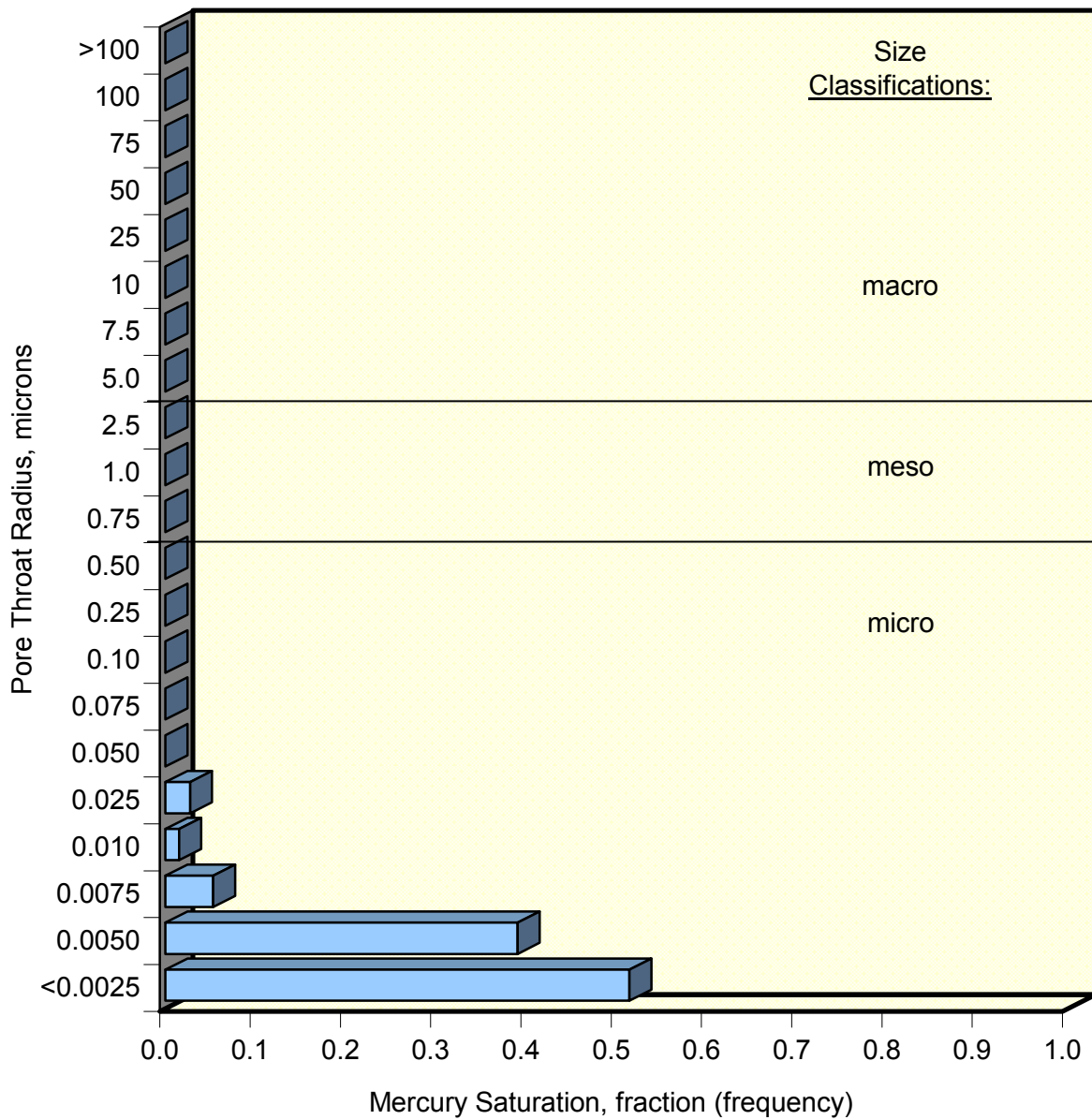
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	10m	un-stressed	Host Plug	
Depth, meters:	650.12		1600psi	na
Klinkenberg Permeability, md:		0.236	0.889	-
Permeability to Air, md:		0.378	-	-
Swanson Permeability, md:		0.0001	-	-
Total Porosity, fraction:		0.075	0.054	-
maximum Sb/Pc, fraction:		0.0001		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0024		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	11m	un-	Host Plug	
Depth, meters:	658.88	stressed	1625psi	na
Klinkenberg Permeability, md:		0.014	0.0201	-
Permeability to Air, md:		0.040	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.015	0.013	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0027		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.19	0.000	1.000	90.5	0.000669	0.231	0.0769	0.0971	0.482	0.957
2.20	0.000	1.000	49.0	0.00124	0.426	0.142	0.179	0.888	1.76
2.45	0.000	1.000	44.0	0.00138	0.475	0.158	0.200	0.991	1.97
2.74	0.000	1.000	39.3	0.00154	0.531	0.177	0.224	1.11	2.21
3.11	0.000	1.000	34.6	0.00175	0.603	0.201	0.254	1.26	2.50
3.44	0.000	1.000	31.3	0.00194	0.667	0.222	0.281	1.39	2.77
3.87	0.000	1.000	27.8	0.00218	0.750	0.250	0.316	1.56	3.11
4.39	0.000	1.000	24.5	0.00247	0.851	0.284	0.358	1.77	3.53
4.93	0.000	1.000	21.9	0.00277	0.955	0.318	0.402	1.99	3.96
5.52	0.000	1.000	19.5	0.00311	1.07	0.357	0.450	2.23	4.43
6.23	0.000	1.000	17.3	0.00350	1.21	0.402	0.508	2.52	5.00
7.01	0.000	1.000	15.4	0.00394	1.36	0.453	0.572	2.84	5.64
7.92	0.000	1.000	13.6	0.00446	1.53	0.512	0.646	3.19	6.36
8.89	0.000	1.000	12.1	0.00500	1.72	0.574	0.725	3.59	7.14
10.1	0.000	1.000	10.7	0.00566	1.95	0.650	0.822	4.07	8.10
11.4	0.000	1.000	9.49	0.00639	2.20	0.733	0.926	4.59	9.12
12.8	0.000	1.000	8.42	0.00720	2.48	0.827	1.04	5.17	10.2
14.5	0.000	1.000	7.45	0.00814	2.80	0.935	1.18	5.84	11.6
16.3	0.000	1.000	6.61	0.00918	3.16	1.05	1.33	6.59	13.1
18.5	0.000	1.000	5.84	0.0104	3.58	1.19	1.51	7.47	14.9
20.8	0.000	1.000	5.17	0.0117	4.04	1.35	1.70	8.43	16.7
23.5	0.000	1.000	4.58	0.0132	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.0150	5.15	1.72	2.17	10.7	21.4
30.2	0.000	1.000	3.57	0.0170	5.84	1.95	2.46	12.2	24.2
34.4	0.000	1.000	3.14	0.0193	6.66	2.22	2.80	13.9	27.6
38.6	0.000	1.000	2.79	0.0217	7.49	2.50	3.15	15.6	31.0
43.6	0.000	1.000	2.47	0.0245	8.46	2.82	3.56	17.6	35.1
49.3	0.000	1.000	2.19	0.0277	9.55	3.18	4.02	19.9	39.6
55.5	0.000	1.000	1.94	0.0312	10.8	3.59	4.53	22.5	44.6
63.9	0.000	1.000	1.69	0.0360	12.4	4.13	5.21	25.9	51.3
71.6	0.000	1.000	1.51	0.0403	13.9	4.62	5.84	29.0	57.5
80.8	0.000	1.000	1.33	0.0455	15.7	5.22	6.59	32.7	64.9
90.8	0.000	1.000	1.19	0.0511	17.6	5.86	7.40	36.7	72.9
106	0.000	1.000	1.02	0.0594	20.5	6.82	8.61	42.8	84.8

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	11m	un-	Host Plug	
Depth, meters:	658.88	stressed	1625psi	na
Klinkenberg Permeability, md:		0.014	0.0201	-
Permeability to Air, md:		0.040	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.015	0.013	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0027		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.932	0.0650	22.4	7.47	9.43	46.7	92.9
132	0.000	1.000	0.816	0.0743	25.6	8.53	10.8	53.4	106
148	0.000	1.000	0.726	0.0835	28.8	9.59	12.1	60.1	119
169	0.000	1.000	0.637	0.0951	32.8	10.9	13.8	68.4	136
191	0.000	1.000	0.563	0.108	37.1	12.4	15.6	77.4	154
215	0.000	1.000	0.500	0.121	41.8	13.9	17.6	87.2	173
244	0.000	1.000	0.441	0.137	47.3	15.8	19.9	98.6	196
277	0.000	1.000	0.390	0.156	53.6	17.9	22.6	112	223
312	0.000	1.000	0.345	0.176	60.6	20.2	25.5	126	251
354	0.000	1.000	0.305	0.199	68.6	22.9	28.9	143	285
399	0.000	1.000	0.270	0.224	77.3	25.8	32.5	161	320
452	0.000	1.000	0.238	0.254	87.6	29.2	36.9	183	364
509	0.000	1.000	0.212	0.286	98.5	32.8	41.5	205	409
577	0.000	1.000	0.187	0.325	112	37.3	47.1	234	464
650	0.000	1.000	0.166	0.366	126	42.0	53.0	263	522
738	0.000	1.000	0.146	0.415	143	47.7	60.2	298	593
833	0.000	1.000	0.129	0.468	161	53.8	67.9	336	669
942	0.000	1.000	0.114	0.530	183	60.9	76.9	382	758
1080	0.000	1.000	0.0995	0.609	210	70.0	88.3	438	870
1220	0.000	1.000	0.0886	0.684	236	78.6	99.2	492	977
1380	0.000	1.000	0.0782	0.775	267	89	112	557	1100
1550	0.000	1.000	0.0696	0.871	300	100	126	626	1240
1750	0.000	1.000	0.0616	0.984	339	113	143	707	1410
1970	0.000	1.000	0.0546	1.11	382	127	161	797	1590
2240	0.000	1.000	0.0480	1.26	435	145	183	907	1800
2520	0.000	1.000	0.0427	1.42	488	163	206	1020	2030
2850	0.000	1.000	0.0378	1.60	553	184	233	1150	2300
3230	0.000	1.000	0.0334	1.82	625	208	263	1300	2590
3640	0.000	1.000	0.0296	2.05	706	235	297	1470	2930
4170	0.000	1.000	0.0258	2.35	809	270	341	1690	3360
4680	0.000	1.000	0.0230	2.64	908	303	382	1890	3760
5280	0.008	0.992	0.0204	2.97	1020	341	431	2130	4250
5970	0.015	0.985	0.0181	3.36	1160	385	487	2420	4800
6750	0.023	0.977	0.0160	3.80	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	11m	un-	Host Plug	
Depth, meters:	658.88	stressed	1625psi	na
Klinkenberg Permeability, md:		0.014	0.0201	-
Permeability to Air, md:		0.040	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.015	0.013	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0027		

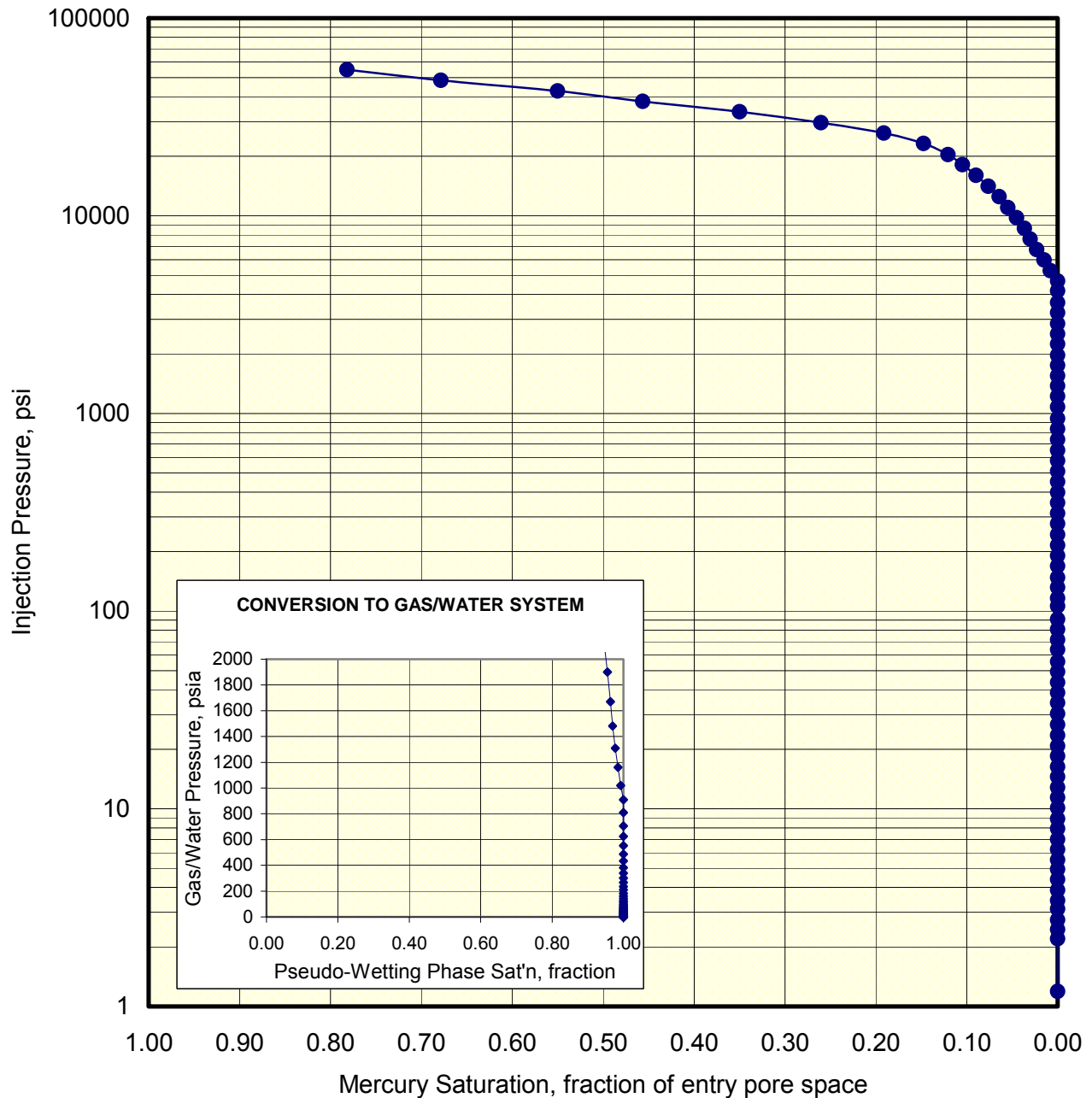
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.030	0.970	0.0141	4.29	1480	493	622	3090	6130
8640	0.037	0.963	0.0125	4.86	1670	558	705	3480	6950
9790	0.045	0.955	0.0110	5.51	1900	632	799	3960	7870
11000	0.055	0.945	0.00976	6.21	2140	713	901	4460	8880
12500	0.064	0.936	0.00863	7.02	2420	807	1020	5050	10000
14100	0.076	0.924	0.00763	7.94	2740	912	1150	5710	11300
16000	0.090	0.910	0.00675	8.99	3100	1030	1300	6460	12800
18100	0.105	0.895	0.00595	10.2	3510	1170	1480	7320	14600
20400	0.121	0.879	0.00527	11.5	3960	1320	1670	8260	16500
23200	0.148	0.852	0.00465	13.0	4490	1500	1890	9360	18600
26200	0.191	0.809	0.00412	14.7	5070	1690	2140	10600	21100
29600	0.260	0.740	0.00364	16.6	5730	1910	2410	11900	23700
33600	0.350	0.650	0.00321	18.9	6500	2170	2740	13600	27000
37900	0.456	0.544	0.00284	21.3	7350	2450	3090	15300	30400
42800	0.550	0.450	0.00252	24.1	8300	2770	3490	17300	34400
48500	0.679	0.321	0.00222	27.3	9410	3140	3960	19600	39000
54900	0.782	0.218	0.00196	30.9	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	11m	un-	Host Plug	
Depth, meters:	658.88	stressed	1625psi	na
Klinkenberg Permeability, md:		0.014	0.0201	-
Permeability to Air, md:		0.040	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.015	0.013	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0027		

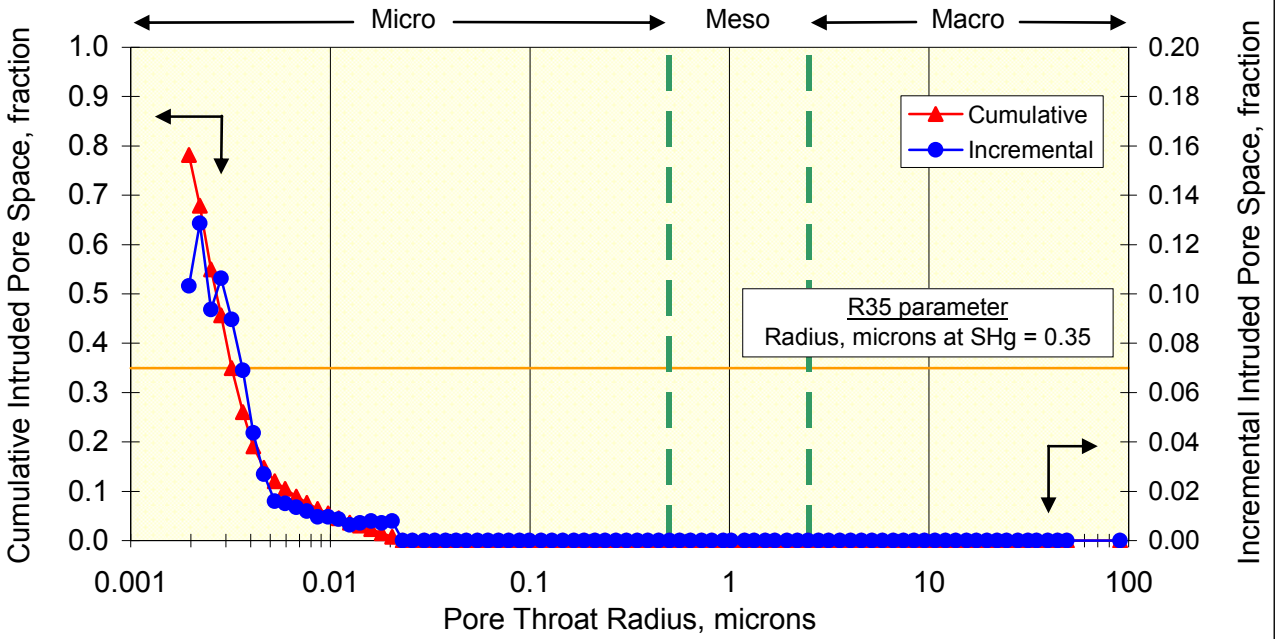
MERCURY INJECTION



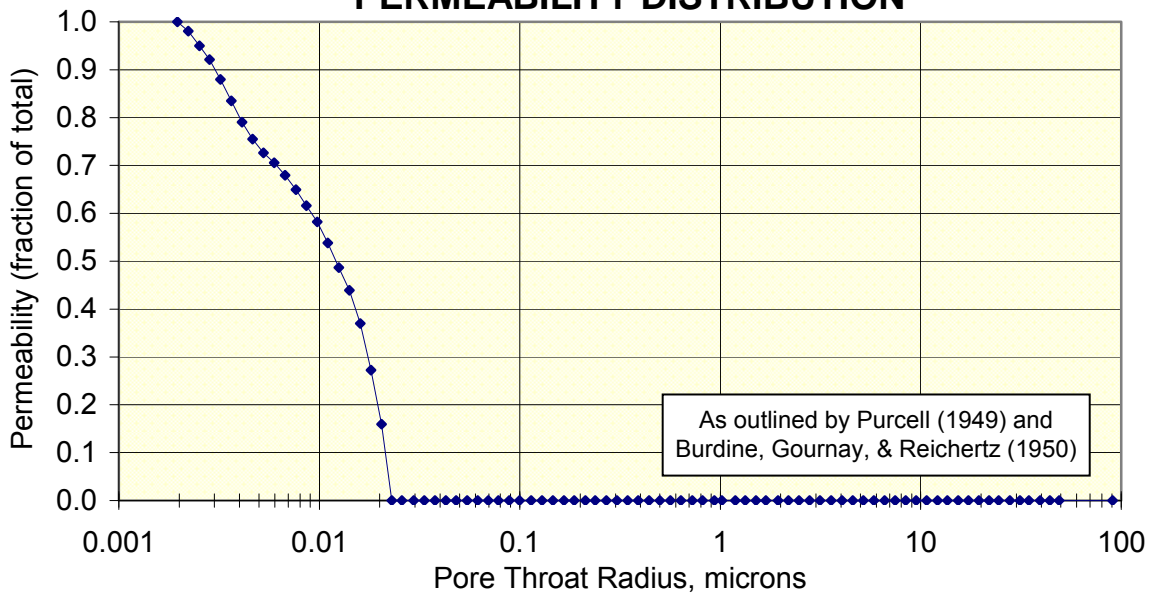
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	11m	un-	Host Plug	
Depth, meters:	658.88	stressed	1625psi	na
Klinkenberg Permeability, md:	0.014	0.014	0.0201	-
Permeability to Air, md:	0.040	0.040	-	-
Swanson Permeability, md:	0.00001	0.00001	-	-
Total Porosity, fraction:	0.015	0.015	0.013	-
maximum Sb/Pc, fraction:	0.00002	0.00002		
R35, microns:	0.0032	0.0032		
R50 (median pore throat radius):	0.0027	0.0027		

PORE THROAT RADIUS DISTRIBUTION



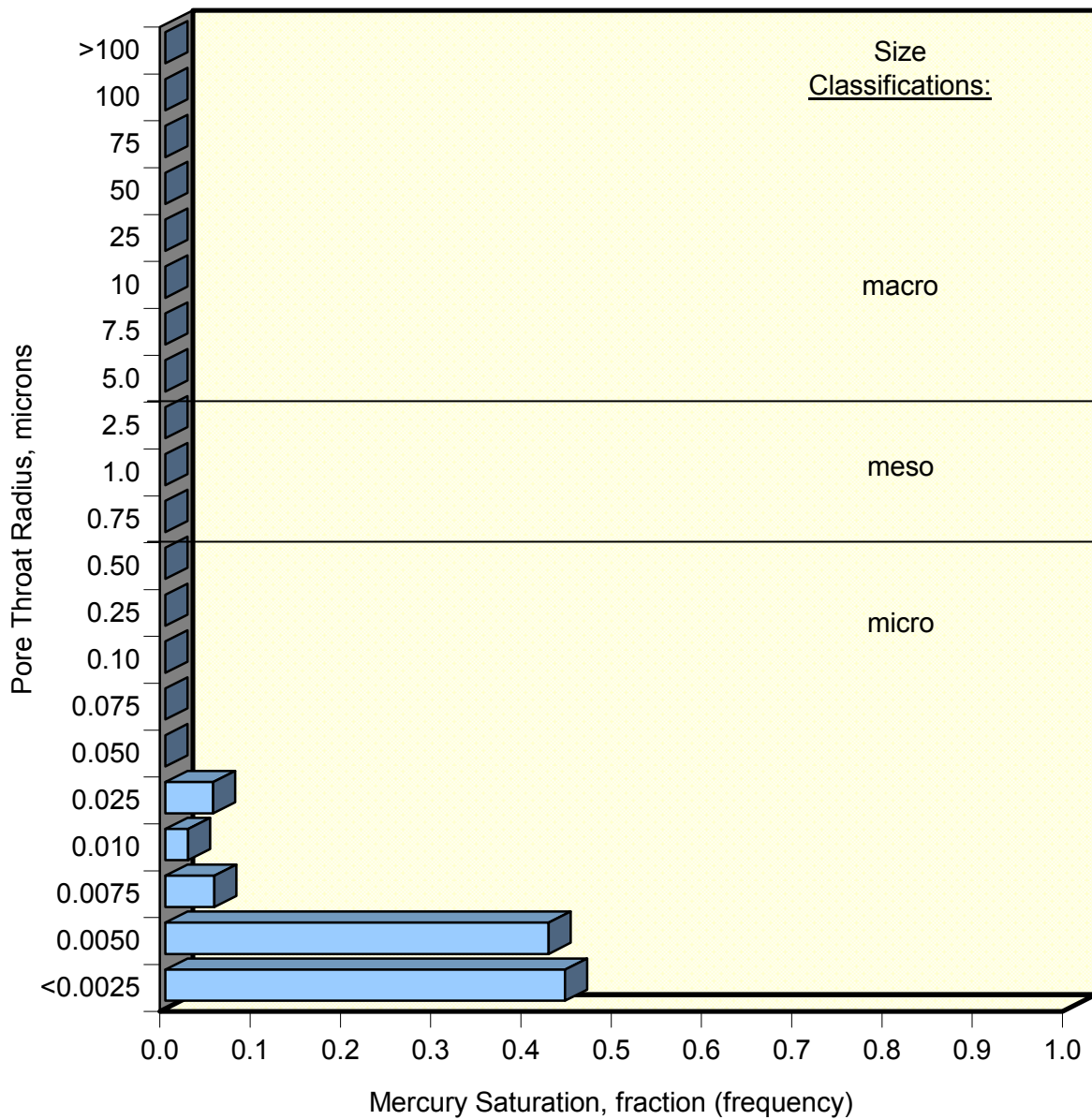
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	11m	un-	Host Plug	
Depth, meters:	658.88	stressed	1625psi	na
Klinkenberg Permeability, md:		0.014	0.0201	-
Permeability to Air, md:		0.040	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.015	0.013	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0032		
R50 (median pore throat radius):		0.0027		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	12m	un-	Host Plug	
Depth, meters:	669.10	stressed	1650psi	na
Klinkenberg Permeability, md:		0.022	0.000067	-
Permeability to Air, md:		0.057	-	-
Swanson Permeability, md:		0.000002	-	-
Total Porosity, fraction:		0.011	0.007	-
maximum Sb/Pc, fraction:		0.00001		
R35, microns:		0.0034		
R50 (median pore throat radius):		0.0026		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.19	0.000	1.000	90.5	0.000987	0.231	0.0769	0.0971	0.482	0.957
2.20	0.000	1.000	49.0	0.00182	0.426	0.142	0.179	0.888	1.76
2.45	0.000	1.000	44.0	0.00203	0.475	0.158	0.200	0.991	1.97
2.74	0.000	1.000	39.3	0.00227	0.531	0.177	0.224	1.11	2.21
3.11	0.000	1.000	34.6	0.00258	0.603	0.201	0.254	1.26	2.50
3.44	0.000	1.000	31.3	0.00285	0.667	0.222	0.281	1.39	2.77
3.87	0.000	1.000	27.8	0.00321	0.750	0.250	0.316	1.56	3.11
4.39	0.000	1.000	24.5	0.00364	0.851	0.284	0.358	1.77	3.53
4.93	0.000	1.000	21.9	0.00409	0.955	0.318	0.402	1.99	3.96
5.52	0.000	1.000	19.5	0.00458	1.07	0.357	0.450	2.23	4.43
6.23	0.000	1.000	17.3	0.00517	1.21	0.402	0.508	2.52	5.00
7.01	0.000	1.000	15.4	0.00581	1.36	0.453	0.572	2.84	5.64
7.92	0.000	1.000	13.6	0.00657	1.53	0.512	0.646	3.19	6.36
8.89	0.000	1.000	12.1	0.00737	1.72	0.574	0.725	3.59	7.14
10.1	0.000	1.000	10.7	0.00835	1.95	0.650	0.822	4.07	8.10
11.4	0.000	1.000	9.49	0.00941	2.20	0.733	0.926	4.59	9.12
12.8	0.000	1.000	8.42	0.0106	2.48	0.827	1.04	5.17	10.2
14.5	0.000	1.000	7.45	0.0120	2.80	0.935	1.18	5.84	11.6
16.3	0.000	1.000	6.61	0.0135	3.16	1.05	1.33	6.59	13.1
18.5	0.000	1.000	5.84	0.0153	3.58	1.19	1.51	7.47	14.9
20.8	0.000	1.000	5.17	0.0173	4.04	1.35	1.70	8.43	16.7
23.5	0.000	1.000	4.58	0.0195	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.0220	5.15	1.72	2.17	10.7	21.4
30.0	0.000	1.000	3.59	0.0249	5.81	1.94	2.45	12.1	24.1
34.2	0.000	1.000	3.15	0.0284	6.63	2.21	2.79	13.8	27.5
38.5	0.000	1.000	2.80	0.0319	7.46	2.49	3.14	15.6	30.9
43.5	0.000	1.000	2.48	0.0361	8.43	2.81	3.55	17.6	35.0
49.1	0.000	1.000	2.19	0.0407	9.52	3.17	4.01	19.9	39.5
55.4	0.000	1.000	1.95	0.0459	10.7	3.58	4.52	22.3	44.5
63.8	0.000	1.000	1.69	0.0529	12.4	4.12	5.20	25.9	51.2
71.4	0.000	1.000	1.51	0.0592	13.8	4.61	5.83	28.8	57.4
80.7	0.000	1.000	1.34	0.0669	15.6	5.21	6.58	32.5	64.8
90.6	0.000	1.000	1.19	0.0752	17.6	5.85	7.39	36.7	72.8
105	0.000	1.000	1.02	0.0875	20.4	6.81	8.60	42.5	84.7

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	12m	un-	Host Plug	
Depth, meters:	669.10	stressed	1650psi	na
Klinkenberg Permeability, md:		0.022	0.000067	-
Permeability to Air, md:		0.057	-	-
Swanson Permeability, md:		0.000002	-	-
Total Porosity, fraction:		0.011	0.007	-
maximum Sb/Pc, fraction:		0.00001		
R35, microns:		0.0034		
R50 (median pore throat radius):		0.0026		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
115	0.000	1.000	0.933	0.0958	22.4	7.46	9.42	46.7	92.8
132	0.000	1.000	0.817	0.109	25.6	8.52	10.8	53.4	106
148	0.000	1.000	0.727	0.123	28.7	9.58	12.1	59.9	119
169	0.000	1.000	0.638	0.140	32.7	10.9	13.8	68.2	136
191	0.000	1.000	0.564	0.158	37.0	12.3	15.6	77.2	154
215	0.000	1.000	0.500	0.179	41.7	13.9	17.6	87.0	173
244	0.000	1.000	0.442	0.202	47.3	15.8	19.9	98.6	196
277	0.000	1.000	0.390	0.229	53.6	17.9	22.6	112	223
312	0.000	1.000	0.345	0.259	60.5	20.2	25.5	126	251
354	0.000	1.000	0.305	0.293	68.5	22.8	28.9	143	285
399	0.000	1.000	0.270	0.331	77.3	25.8	32.5	161	320
452	0.000	1.000	0.238	0.375	87.6	29.2	36.9	183	364
508	0.000	1.000	0.212	0.422	98.5	32.8	41.5	205	409
577	0.000	1.000	0.187	0.479	112	37.3	47.1	234	464
650	0.000	1.000	0.166	0.539	126	42.0	53.0	263	522
738	0.000	1.000	0.146	0.612	143	47.7	60.2	298	593
833	0.000	1.000	0.129	0.690	161	53.8	67.9	336	669
942	0.000	1.000	0.114	0.781	183	60.9	76.9	382	758
1080	0.000	1.000	0.0995	0.898	210	69.9	88.3	438	870
1220	0.000	1.000	0.0886	1.01	236	78.6	99.2	492	977
1380	0.000	1.000	0.0782	1.14	267	89.0	112	557	1100
1550	0.000	1.000	0.0696	1.28	300	100	126	626	1240
1750	0.000	1.000	0.0616	1.45	339	113	143	707	1410
1970	0.000	1.000	0.0546	1.64	382	127	161	797	1590
2240	0.000	1.000	0.0480	1.86	435	145	183	907	1800
2520	0.005	0.995	0.0427	2.09	488	163	206	1020	2030
2850	0.012	0.988	0.0378	2.37	553	184	233	1150	2300
3230	0.018	0.982	0.0334	2.68	625	208	263	1300	2590
3640	0.026	0.974	0.0296	3.02	706	235	297	1470	2930
4170	0.034	0.966	0.0258	3.46	809	270	341	1690	3360
4680	0.040	0.960	0.0230	3.88	908	303	382	1890	3760
5280	0.050	0.950	0.0204	4.38	1020	341	431	2130	4250
5970	0.059	0.941	0.0181	4.95	1160	385	487	2420	4800
6750	0.068	0.932	0.0160	5.60	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	12m	un-	Host Plug	
Depth, meters:	669.10	stressed	1650psi	na
Klinkenberg Permeability, md:		0.022	0.000067	-
Permeability to Air, md:		0.057	-	-
Swanson Permeability, md:		0.000002	-	-
Total Porosity, fraction:		0.011	0.007	-
maximum Sb/Pc, fraction:		0.00001		
R35, microns:		0.0034		
R50 (median pore throat radius):		0.0026		

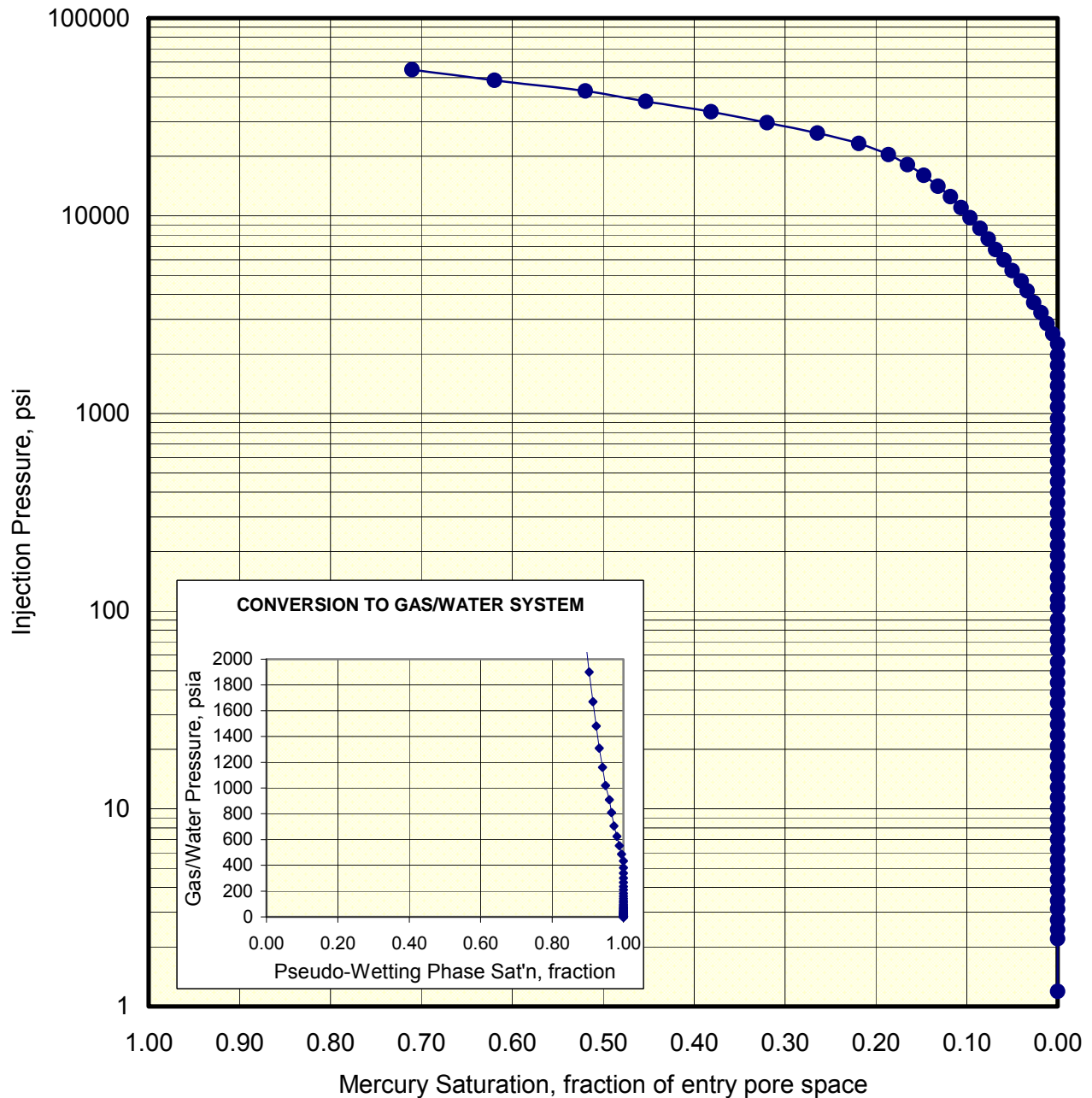
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.076	0.924	0.0141	6.33	1480	493	622	3090	6130
8640	0.085	0.915	0.0125	7.16	1670	558	705	3480	6950
9790	0.096	0.904	0.0110	8.12	1900	632	799	3960	7870
11000	0.106	0.894	0.00976	9.16	2140	713	901	4460	8880
12500	0.118	0.882	0.00863	10.4	2420	807	1020	5050	10000
14100	0.132	0.868	0.00763	11.7	2740	912	1150	5710	11300
16000	0.147	0.853	0.00675	13.2	3100	1030	1300	6460	12800
18100	0.165	0.835	0.00595	15.0	3510	1170	1480	7320	14600
20400	0.186	0.814	0.00527	17.0	3960	1320	1670	8260	16500
23200	0.219	0.781	0.00465	19.2	4490	1500	1890	9360	18600
26200	0.264	0.736	0.00412	21.7	5070	1690	2140	10600	21100
29600	0.320	0.680	0.00364	24.5	5730	1910	2410	11900	23700
33600	0.381	0.619	0.00321	27.8	6500	2170	2740	13600	27000
37900	0.453	0.547	0.00284	31.4	7350	2450	3090	15300	30400
42800	0.520	0.480	0.00252	35.5	8300	2770	3490	17300	34400
48500	0.619	0.381	0.00222	40.3	9410	3140	3960	19600	39000
54900	0.710	0.290	0.00196	45.6	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	12m	un-	Host Plug	
Depth, meters:	669.10	stressed	1650psi	na
Klinkenberg Permeability, md:	0.022	0.000067	-	-
Permeability to Air, md:	0.057	-	-	-
Swanson Permeability, md:	0.000002	-	-	-
Total Porosity, fraction:	0.011	0.007	-	-
maximum Sb/Pc, fraction:	0.00001			
R35, microns:	0.0034			
R50 (median pore throat radius):	0.0026			

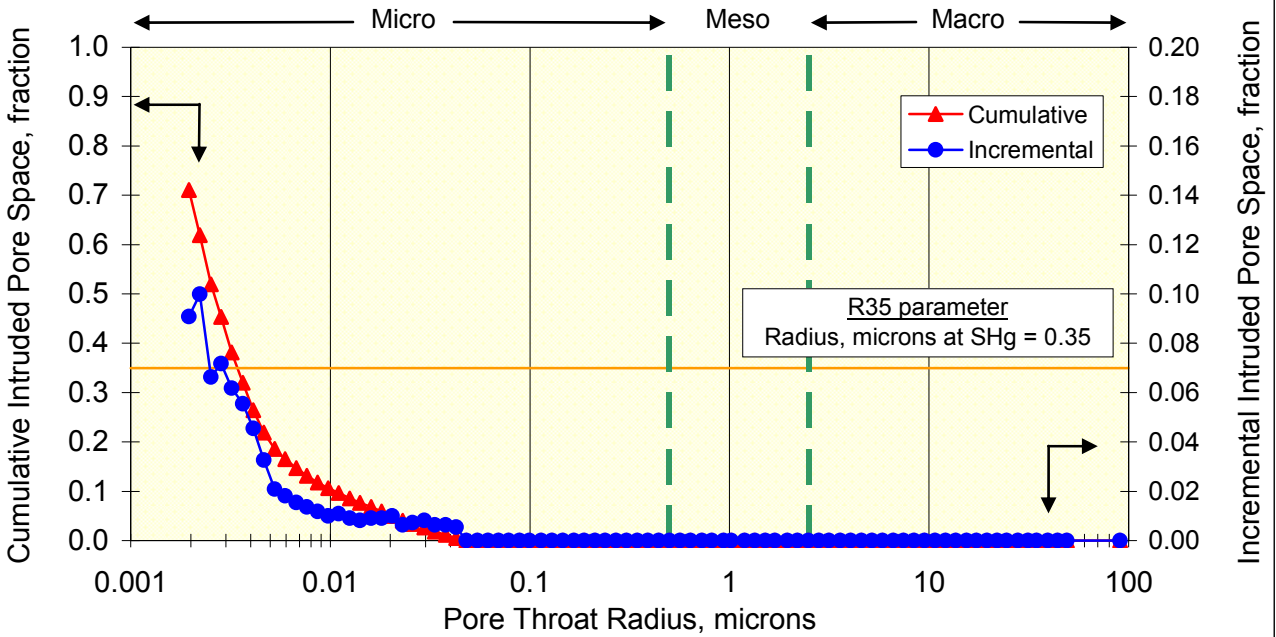
MERCURY INJECTION



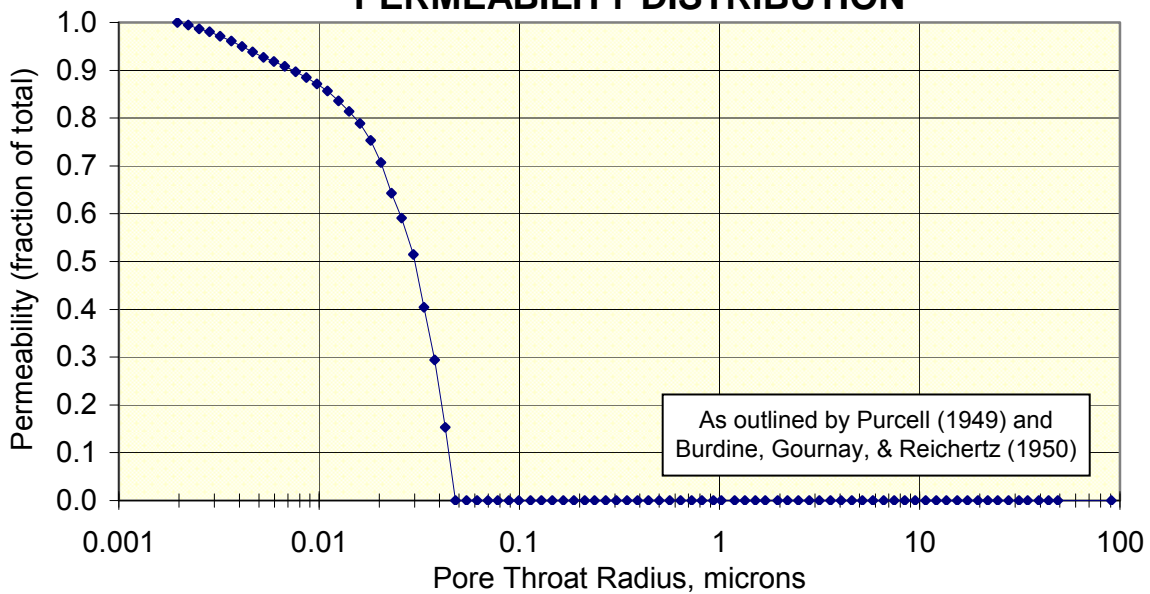
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	12m	un-	Host Plug	
Depth, meters:	669.10	stressed	1650psi	na
Klinkenberg Permeability, md:	0.022	0.000067	-	-
Permeability to Air, md:	0.057	-	-	-
Swanson Permeability, md:	0.000002	-	-	-
Total Porosity, fraction:	0.011	0.007	-	-
maximum Sb/Pc, fraction:	0.00001			
R35, microns:	0.0034			
R50 (median pore throat radius):	0.0026			

PORE THROAT RADIUS DISTRIBUTION



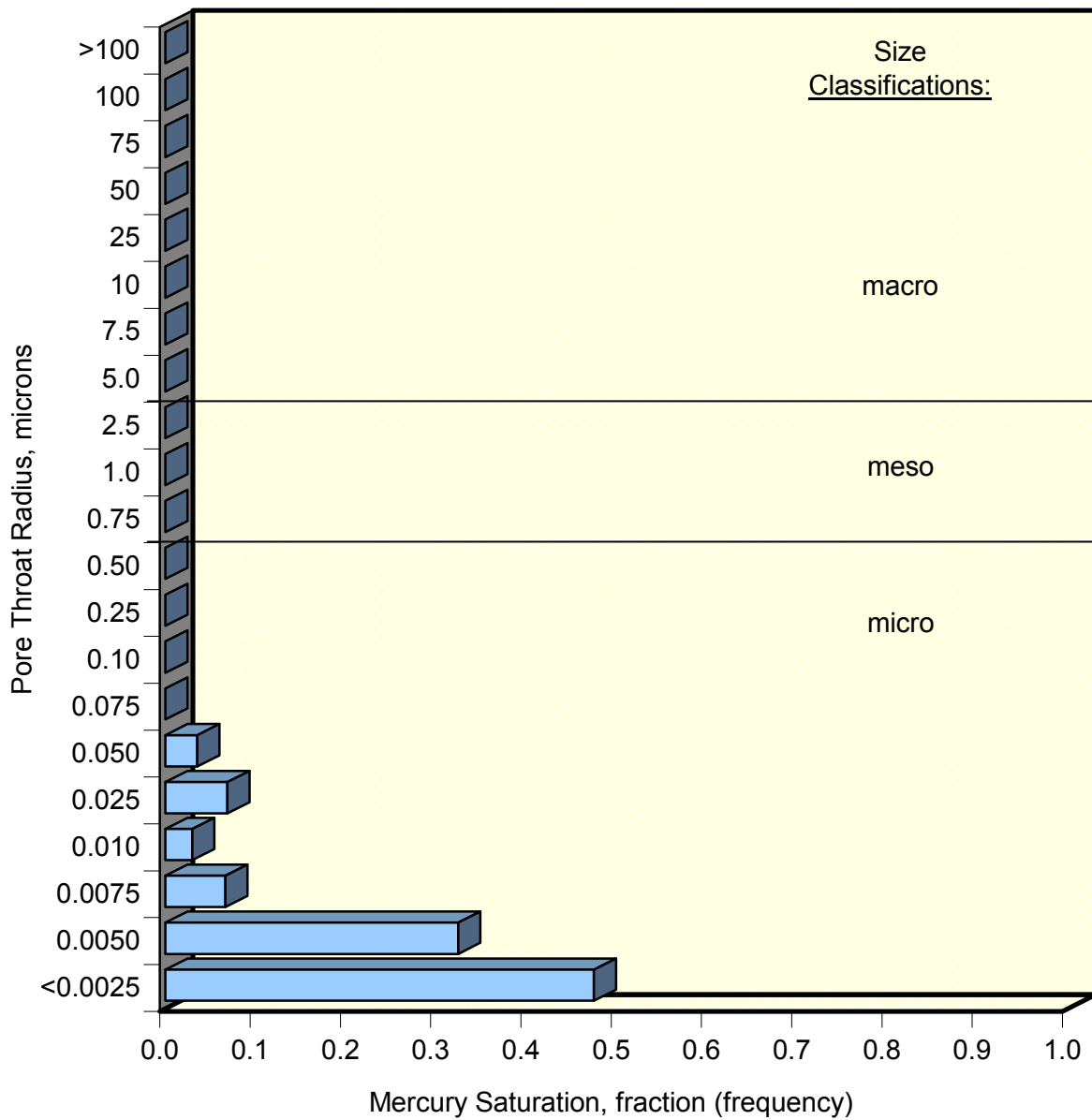
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	12m	un-stressed	Host Plug	1650psi	na
Depth, meters:	669.10				
Klinkenberg Permeability, md:		0.022	0.000067		-
Permeability to Air, md:		0.057	-		-
Swanson Permeability, md:		0.000002	-		-
Total Porosity, fraction:		0.011	0.007		-
maximum Sb/Pc, fraction:		0.00001			
R35, microns:		0.0034			
R50 (median pore throat radius):		0.0026			

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	13m	un-	Host Plug	
Depth, meters:	678.63	stressed	1675psi	na
Klinkenberg Permeability, md:		0.005	0.000142	-
Permeability to Air, md:		0.020	-	-
Swanson Permeability, md:		0.000003	-	-
Total Porosity, fraction:		0.013	0.003	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0037		
R50 (median pore throat radius):		0.0029		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.12	0.000	1.000	96.2	0.000411	0.217	0.0723	0.0914	0.453	0.900
2.12	0.000	1.000	50.8	0.000778	0.411	0.137	0.173	0.857	1.70
2.36	0.000	1.000	45.7	0.000866	0.457	0.152	0.193	0.953	1.90
2.66	0.000	1.000	40.5	0.000977	0.515	0.172	0.217	1.07	2.14
2.98	0.000	1.000	36.2	0.00109	0.578	0.193	0.243	1.21	2.39
3.37	0.000	1.000	32.0	0.00124	0.653	0.218	0.275	1.36	2.71
3.80	0.000	1.000	28.4	0.00140	0.736	0.245	0.310	1.53	3.05
4.28	0.000	1.000	25.2	0.00157	0.829	0.276	0.349	1.73	3.44
4.85	0.000	1.000	22.2	0.00178	0.94	0.313	0.396	1.96	3.90
5.46	0.000	1.000	19.7	0.00200	1.06	0.353	0.445	2.21	4.38
6.16	0.000	1.000	17.5	0.00226	1.19	0.398	0.503	2.48	4.96
6.93	0.000	1.000	15.5	0.00254	1.34	0.448	0.565	2.79	5.57
7.84	0.000	1.000	13.7	0.00288	1.52	0.506	0.640	3.17	6.31
8.84	0.000	1.000	12.2	0.00325	1.71	0.571	0.721	3.57	7.10
9.98	0.000	1.000	10.8	0.00366	1.93	0.645	0.814	4.02	8.02
11.3	0.000	1.000	9.55	0.00414	2.19	0.729	0.920	4.57	9.06
12.7	0.000	1.000	8.46	0.00468	2.47	0.823	1.04	5.15	10.2
14.4	0.000	1.000	7.48	0.00529	2.79	0.930	1.17	5.82	11.5
16.3	0.000	1.000	6.63	0.00597	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.86	0.00675	3.56	1.19	1.5	7.42	14.8
20.8	0.000	1.000	5.19	0.00763	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.59	0.00862	4.55	1.52	1.92	9.49	18.9
26.6	0.000	1.000	4.06	0.00975	5.15	1.72	2.17	10.7	21.4
30.3	0.000	1.000	3.55	0.0111	5.88	1.96	2.48	12.3	24.4
34.5	0.000	1.000	3.13	0.0127	6.68	2.23	2.81	13.9	27.7
38.7	0.000	1.000	2.79	0.0142	7.50	2.50	3.16	15.6	31.1
43.4	0.000	1.000	2.48	0.0159	8.41	2.80	3.54	17.5	34.9
49.5	0.000	1.000	2.18	0.0182	9.59	3.20	4.04	20.0	39.8
55.6	0.000	1.000	1.94	0.0204	10.8	3.59	4.53	22.5	44.6
63.1	0.000	1.000	1.71	0.0231	12.2	4.07	5.14	25.4	50.6
71.2	0.000	1.000	1.51	0.0261	13.8	4.60	5.81	28.8	57.2
80.5	0.000	1.000	1.34	0.0296	15.6	5.20	6.57	32.5	64.7
91.1	0.000	1.000	1.18	0.0334	17.7	5.88	7.43	36.9	73.2
103	0.000	1.000	1.05	0.0378	19.9	6.65	8.40	41.5	82.8

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	13m	un-	Host Plug	
Depth, meters:	678.63	stressed	1675psi	na
Klinkenberg Permeability, md:		0.005	0.000142	-
Permeability to Air, md:		0.020	-	-
Swanson Permeability, md:		0.000003	-	-
Total Porosity, fraction:		0.013	0.003	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0037		
R50 (median pore throat radius):		0.0029		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.926	0.0427	22.6	7.52	9.50	47.1	93.6
132	0.000	1.000	0.818	0.0484	25.5	8.51	10.7	53.2	105
150	0.000	1.000	0.719	0.0550	29.0	9.67	12.2	60.5	120
169	0.000	1.000	0.639	0.0619	32.7	10.9	13.8	68.2	136
190	0.000	1.000	0.566	0.0699	36.9	12.3	15.5	77.0	153
214	0.000	1.000	0.504	0.0785	41.5	13.8	17.5	86.5	172
242	0.000	1.000	0.444	0.089	47.0	15.7	19.8	98.0	195
278	0.000	1.000	0.387	0.102	53.9	18.0	22.7	112	224
314	0.000	1.000	0.343	0.115	60.9	20.3	25.6	127	252
356	0.000	1.000	0.303	0.131	68.9	23.0	29.0	144	286
402	0.000	1.000	0.268	0.148	77.9	26.0	32.8	162	323
452	0.000	1.000	0.238	0.166	87.5	29.2	36.9	182	364
512	0.000	1.000	0.211	0.188	99.1	33.0	41.7	207	411
580	0.000	1.000	0.186	0.213	112	37.5	47.3	234	466
650	0.000	1.000	0.166	0.239	126	42.0	53.1	263	523
743	0.000	1.000	0.145	0.273	144	48.0	60.6	300	597
831	0.000	1.000	0.130	0.305	161	53.7	67.8	336	668
961	0.000	1.000	0.112	0.353	186	62.0	78.4	388	772
1120	0.000	1.000	0.0966	0.409	216	72.0	91.0	450	897
1240	0.000	1.000	0.0867	0.456	241	80.3	101	503	995
1380	0.000	1.000	0.0779	0.508	268	89.4	113	559	1110
1560	0.000	1.000	0.0689	0.574	303	101	128	632	1260
1760	0.000	1.000	0.0612	0.646	341	114	144	711	1420
2010	0.000	1.000	0.0537	0.737	389	130	164	811	1620
2260	0.000	1.000	0.0478	0.828	437	146	184	911	1810
2540	0.000	1.000	0.0423	0.934	493	164	208	1030	2050
2870	0.000	1.000	0.0375	1.06	557	186	234	1160	2310
3270	0.000	1.000	0.0330	1.20	633	211	267	1320	2630
3650	0.000	1.000	0.0295	1.34	708	236	298	1480	2940
4200	0.000	1.000	0.0257	1.54	814	271	343	1700	3380
4710	0.000	1.000	0.0229	1.73	913	304	384	1900	3780
5300	0.000	1.000	0.0203	1.95	1030	342	432	2150	4260
5970	0.009	0.991	0.0180	2.19	1160	386	487	2420	4800
6760	0.017	0.983	0.0159	2.48	1310	437	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	13m	un-	Host Plug	
Depth, meters:	678.63	stressed	1675psi	na
Klinkenberg Permeability, md:		0.005	0.000142	-
Permeability to Air, md:		0.020	-	-
Swanson Permeability, md:		0.000003	-	-
Total Porosity, fraction:		0.013	0.003	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0037		
R50 (median pore throat radius):		0.0029		

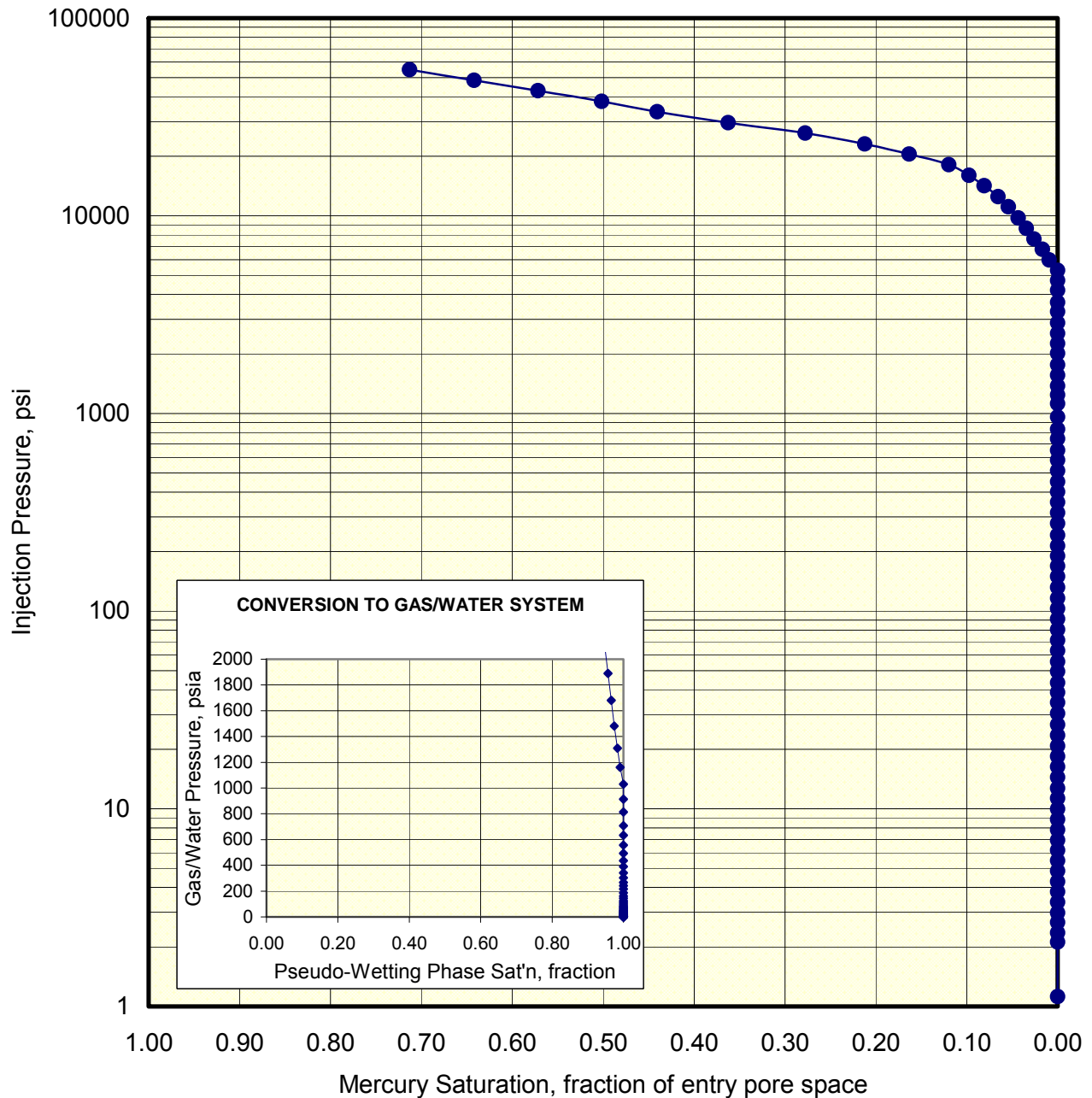
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.026	0.974	0.0141	2.80	1480	493	622	3090	6130
8640	0.034	0.966	0.0125	3.17	1680	558	705	3500	6950
9760	0.044	0.956	0.0110	3.58	1890	631	796	3940	7840
11100	0.054	0.946	0.00974	4.06	2140	715	903	4460	8900
12500	0.066	0.934	0.00861	4.59	2430	808	1020	5070	10000
14200	0.081	0.919	0.00761	5.20	2740	915	1160	5710	11400
16000	0.098	0.902	0.00675	5.86	3100	1030	1300	6460	12800
18100	0.120	0.880	0.00596	6.64	3500	1170	1470	7300	14500
20500	0.163	0.837	0.00525	7.53	3980	1330	1670	8300	16500
23100	0.212	0.788	0.00466	8.49	4480	1490	1890	9340	18600
26200	0.278	0.722	0.00412	9.60	5070	1690	2130	10600	21000
29600	0.363	0.637	0.00364	10.9	5740	1910	2420	12000	23800
33600	0.440	0.560	0.00321	12.3	6510	2170	2740	13600	27000
37900	0.502	0.498	0.00285	13.9	7340	2450	3090	15300	30400
42900	0.572	0.428	0.00251	15.7	8310	2770	3500	17300	34500
48500	0.642	0.358	0.00222	17.8	9390	3130	3950	19600	38900
54800	0.713	0.287	0.00197	20.1	10600	3540	4470	22100	44000

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	13m	un-	Host Plug
Depth, meters:	678.63	stressed	1675psi na
Klinkenberg Permeability, md:	0.005	0.000142	-
Permeability to Air, md:	0.020	-	-
Swanson Permeability, md:	0.000003	-	-
Total Porosity, fraction:	0.013	0.003	-
maximum Sb/Pc, fraction:	0.00002		
R35, microns:	0.0037		
R50 (median pore throat radius):	0.0029		

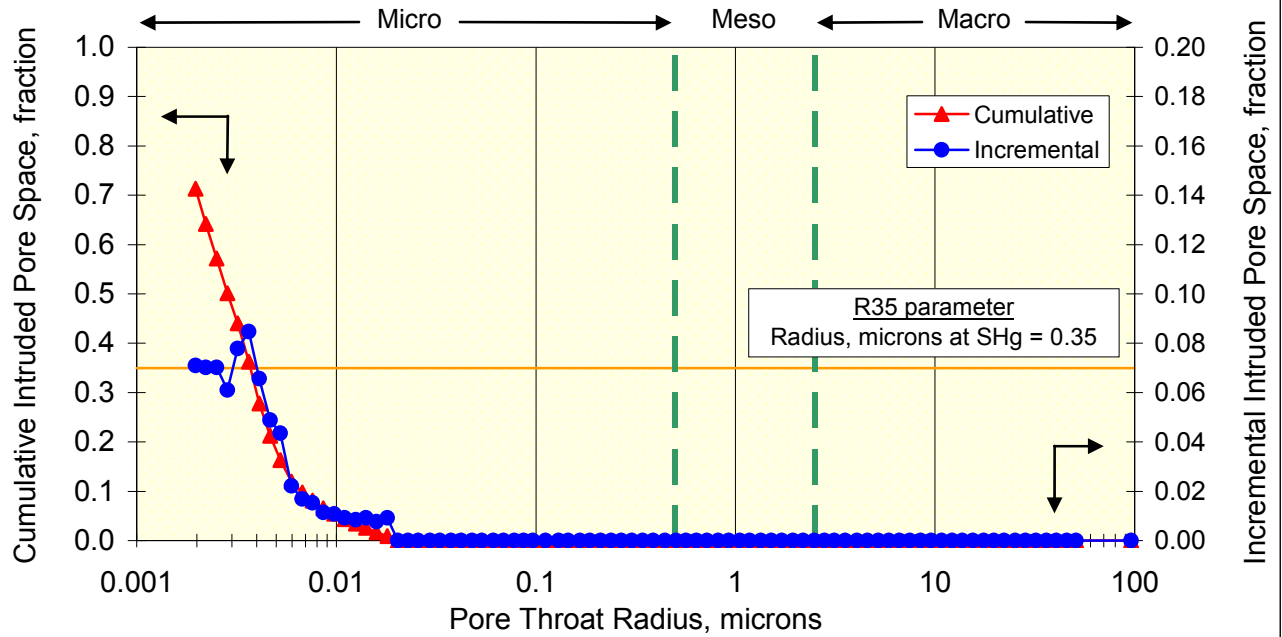
MERCURY INJECTION



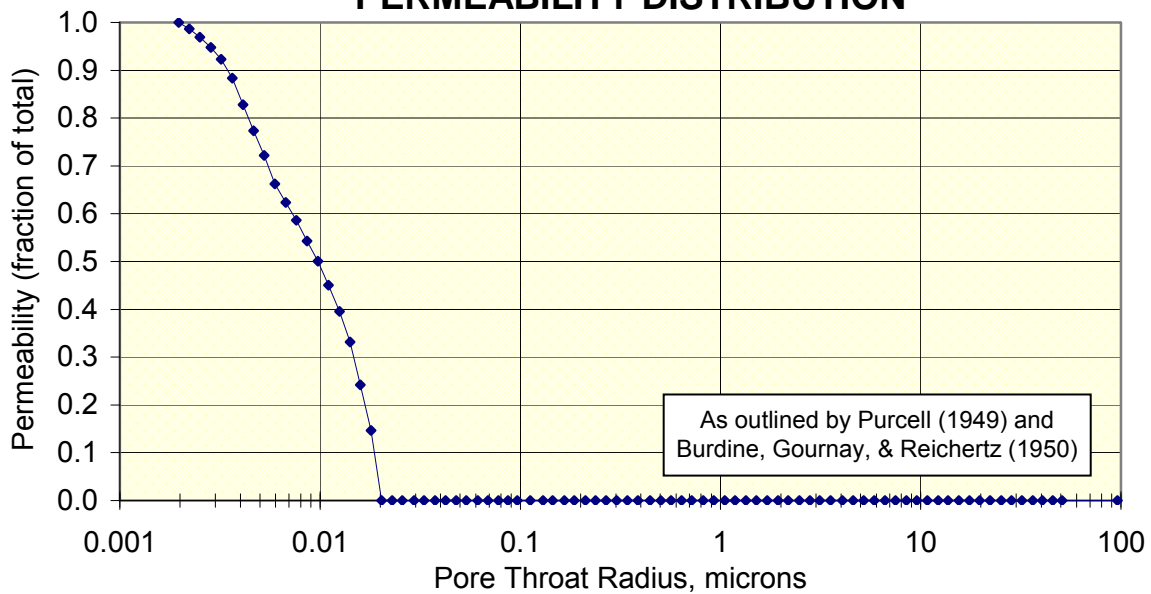
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	13m	un-	Host Plug	
Depth, meters:	678.63	stressed	1675psi	na
Klinkenberg Permeability, md:	0.005	0.000142	-	-
Permeability to Air, md:	0.020	-	-	-
Swanson Permeability, md:	0.000003	-	-	-
Total Porosity, fraction:	0.013	0.003	-	-
maximum Sb/Pc, fraction:	0.00002			
R35, microns:	0.0037			
R50 (median pore throat radius):	0.0029			

PORE THROAT RADIUS DISTRIBUTION



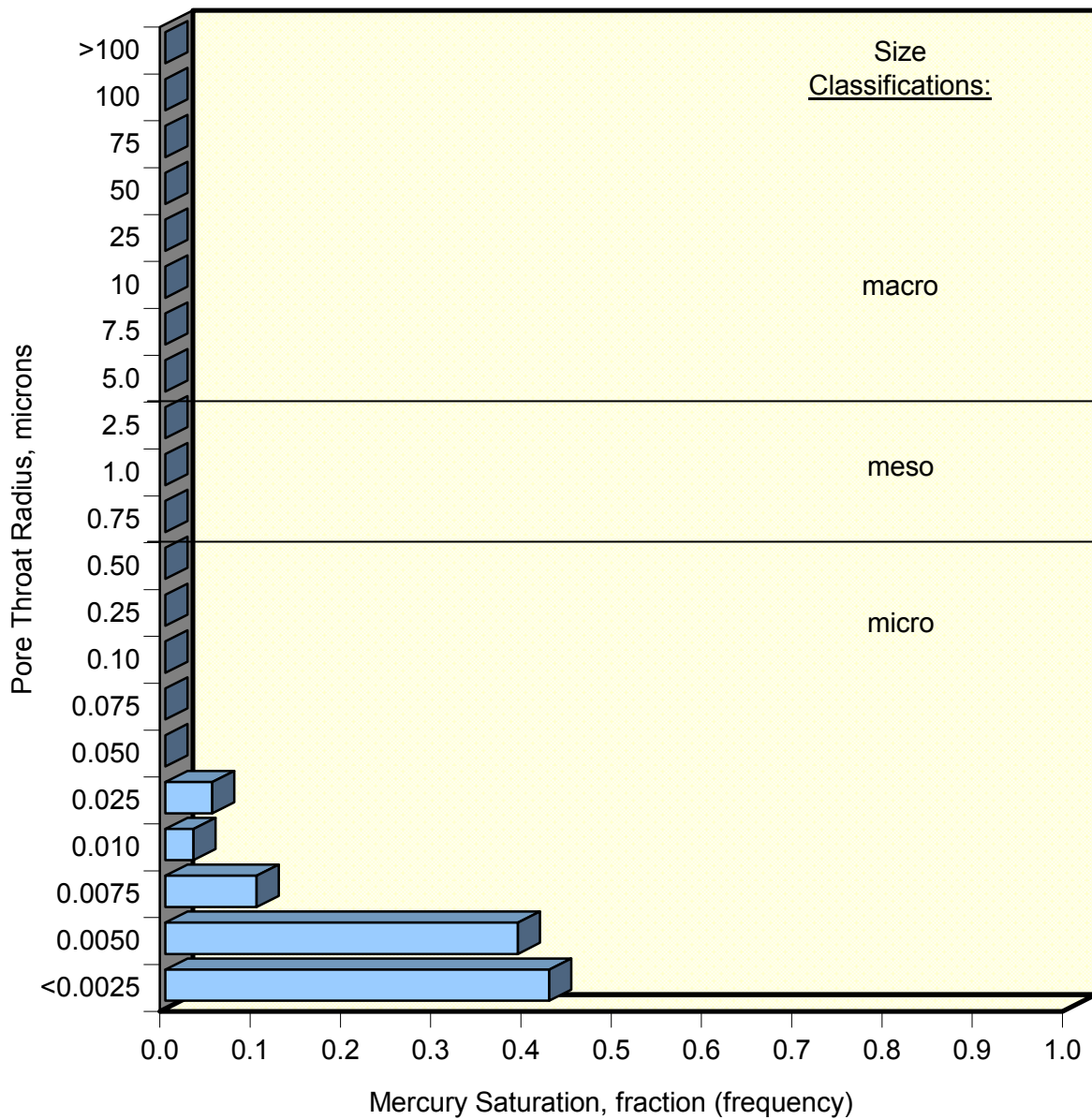
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	13m	un-	Host Plug	
Depth, meters:	678.63	stressed	1675psi	na
Klinkenberg Permeability, md:		0.005	0.000142	-
Permeability to Air, md:		0.020	-	-
Swanson Permeability, md:		0.000003	-	-
Total Porosity, fraction:		0.013	0.003	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0037		
R50 (median pore throat radius):		0.0029		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	14m	un-	Host Plug	
Depth, meters:	687.10	stressed	1700psi	na
Klinkenberg Permeability, md:		n/a	0.0019	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.020	0.011	-
maximum Sb/Pc, fraction:		0.00004		
R35, microns:		0.0049		
R50 (median pore throat radius):		0.0038		

J values calculated using the Swanson permeability

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.12	0.000	1.000	96.2	0.000015	0.217	0.0723	0.0914	0.453	0.900
2.12	0.000	1.000	50.8	0.000027	0.411	0.137	0.173	0.857	1.70
2.36	0.000	1.000	45.7	0.000031	0.457	0.152	0.193	0.953	1.90
2.66	0.000	1.000	40.5	0.000034	0.515	0.172	0.217	1.07	2.14
2.98	0.000	1.000	36.2	0.000039	0.578	0.193	0.243	1.21	2.39
3.37	0.000	1.000	32.0	0.000044	0.653	0.218	0.275	1.36	2.71
3.80	0.000	1.000	28.4	0.000049	0.736	0.245	0.310	1.53	3.05
4.28	0.000	1.000	25.2	0.000055	0.829	0.276	0.349	1.73	3.44
4.85	0.000	1.000	22.2	0.000063	0.940	0.313	0.396	1.96	3.90
5.46	0.000	1.000	19.7	0.000071	1.06	0.353	0.445	2.21	4.38
6.16	0.000	1.000	17.5	0.000080	1.19	0.398	0.503	2.48	4.96
6.93	0.000	1.000	15.5	0.000090	1.34	0.448	0.565	2.79	5.57
7.84	0.000	1.000	13.7	0.000101	1.52	0.506	0.640	3.17	6.31
8.84	0.000	1.000	12.2	0.000114	1.71	0.571	0.721	3.57	7.10
9.98	0.000	1.000	10.8	0.000129	1.93	0.645	0.814	4.02	8.02
11.3	0.000	1.000	9.55	0.000146	2.19	0.729	0.920	4.57	9.06
12.7	0.000	1.000	8.46	0.000165	2.47	0.823	1.04	5.15	10.2
14.4	0.000	1.000	7.48	0.000186	2.79	0.930	1.17	5.82	11.5
16.3	0.000	1.000	6.63	0.000210	3.15	1.05	1.33	6.57	13.1
18.4	0.000	1.000	5.86	0.000238	3.56	1.19	1.50	7.42	14.8
20.8	0.000	1.000	5.19	0.000269	4.03	1.34	1.69	8.40	16.7
23.5	0.000	1.000	4.59	0.000304	4.55	1.52	1.92	9.49	18.9
26.6	0.000	1.000	4.06	0.000344	5.15	1.72	2.17	10.7	21.4
30.3	0.000	1.000	3.55	0.000393	5.88	1.96	2.47	12.3	24.3
34.5	0.000	1.000	3.13	0.000446	6.68	2.23	2.81	13.9	27.7
38.7	0.000	1.000	2.79	0.000500	7.49	2.50	3.15	15.6	31.0
43.4	0.000	1.000	2.48	0.000562	8.41	2.80	3.54	17.5	34.9
49.5	0.000	1.000	2.18	0.000640	9.59	3.20	4.04	20.0	39.8
55.5	0.000	1.000	1.94	0.000719	10.8	3.59	4.53	22.5	44.6
63.0	0.000	1.000	1.71	0.000816	12.2	4.07	5.14	25.4	50.6
71.2	0.000	1.000	1.51	0.000921	13.8	4.60	5.80	28.8	57.1
80.5	0.000	1.000	1.34	0.00104	15.6	5.20	6.57	32.5	64.7
91.1	0.000	1.000	1.18	0.00118	17.6	5.88	7.43	36.7	73.2
103	0.000	1.000	1.05	0.00133	19.9	6.65	8.39	41.5	82.7

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	14m	un-	Host Plug	
Depth, meters:	687.10	stressed	1700psi	na
Klinkenberg Permeability, md:		n/a	0.0019	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.020	0.011	-
maximum Sb/Pc, fraction:		0.00004		
R35, microns:		0.0049		
R50 (median pore throat radius):		0.0038		

J values calculated using the Swanson permeability

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.926	0.00151	22.6	7.52	9.49	47.1	93.5
132	0.000	1.000	0.818	0.00170	25.5	8.51	10.7	53.2	105
150	0.000	1.000	0.720	0.00194	29.0	9.67	12.2	60.5	120
169	0.000	1.000	0.639	0.00218	32.7	10.9	13.8	68.2	136
190	0.000	1.000	0.566	0.00246	36.9	12.3	15.5	77.0	153
214	0.000	1.000	0.504	0.00277	41.5	13.8	17.5	86.5	172
242	0.000	1.000	0.444	0.00314	47.0	15.7	19.8	98.0	195
278	0.000	1.000	0.387	0.00360	53.9	18.0	22.7	112	224
314	0.000	1.000	0.343	0.00407	60.9	20.3	25.6	127	252
355	0.000	1.000	0.303	0.00460	68.9	23.0	29.0	144	286
402	0.000	1.000	0.268	0.00520	77.9	26.0	32.8	162	323
452	0.000	1.000	0.239	0.00585	87.5	29.2	36.9	182	364
512	0.000	1.000	0.211	0.00662	99.1	33.0	41.7	207	411
580	0.000	1.000	0.186	0.00751	112	37.5	47.3	234	466
650	0.000	1.000	0.166	0.00842	126	42.0	53.1	263	523
743	0.000	1.000	0.145	0.00962	144	48.0	60.6	300	597
831	0.000	1.000	0.130	0.0108	161	53.7	67.8	336	668
960	0.000	1.000	0.112	0.0124	186	62.0	78.4	388	772
1120	0.000	1.000	0.0966	0.0144	216	72.0	91.0	450	897
1240	0.000	1.000	0.0867	0.0161	241	80.3	101	503	995
1380	0.000	1.000	0.0779	0.0179	268	89.4	113	559	1110
1560	0.000	1.000	0.0689	0.0202	303	101	128	632	1260
1760	0.000	1.000	0.0612	0.0228	341	114	144	711	1420
2010	0.000	1.000	0.0537	0.0260	389	130	164	811	1620
2260	0.000	1.000	0.0478	0.0292	437	146	184	911	1810
2540	0.000	1.000	0.0423	0.0329	493	164	208	1030	2050
2870	0.000	1.000	0.0375	0.0372	557	186	234	1160	2310
3270	0.000	1.000	0.0330	0.0423	633	211	267	1320	2630
3650	0.000	1.000	0.0295	0.0473	708	236	298	1480	2940
4200	0.000	1.000	0.0257	0.0543	814	271	343	1700	3380
4710	0.000	1.000	0.0229	0.0610	913	304	384	1900	3780
5300	0.000	1.000	0.0203	0.0686	1030	342	432	2150	4260
5970	0.009	0.991	0.0180	0.0773	1160	386	487	2420	4800
6760	0.017	0.983	0.0159	0.0875	1310	437	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	14m	un-	Host Plug	
Depth, meters:	687.10	stressed	1700psi	na
Klinkenberg Permeability, md:		n/a	0.0019	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.020	0.011	-
maximum Sb/Pc, fraction:		0.00004		
R35, microns:		0.0049		
R50 (median pore throat radius):		0.0038		

J values calculated using the Swanson permeability

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

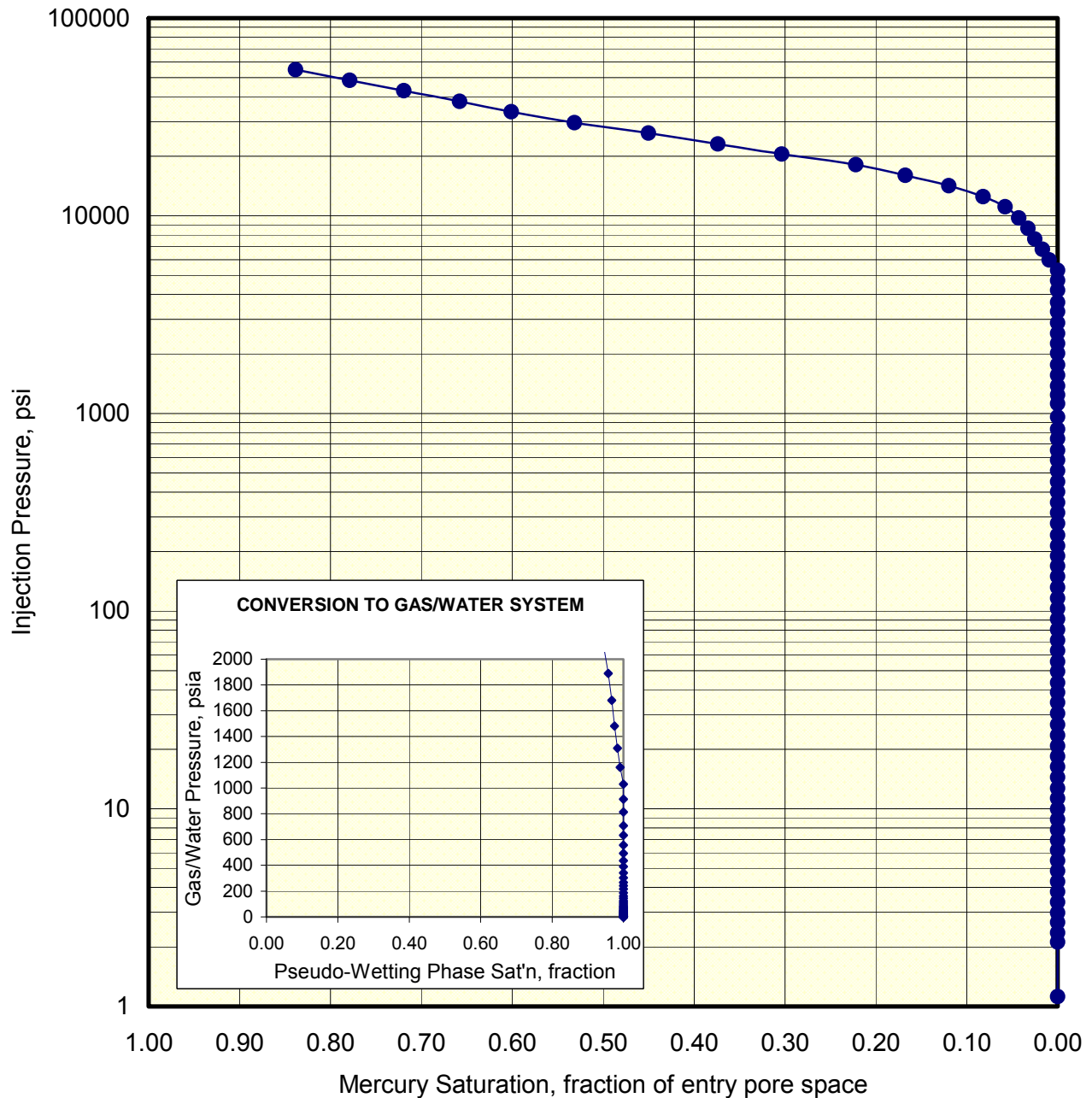
Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.025	0.975	0.0141	0.0987	1480	493	622	3090	6130
8640	0.033	0.967	0.0125	0.112	1680	558	705	3500	6950
9760	0.043	0.957	0.0110	0.126	1890	631	796	3940	7840
11100	0.058	0.942	0.00974	0.143	2140	715	903	4460	8900
12500	0.082	0.918	0.00861	0.162	2430	808	1020	5070	10000
14200	0.120	0.880	0.00761	0.183	2740	915	1160	5710	11400
16000	0.168	0.832	0.00675	0.207	3100	1030	1300	6460	12800
18100	0.222	0.778	0.00596	0.234	3500	1170	1470	7300	14500
20500	0.303	0.697	0.00525	0.266	3980	1330	1670	8300	16500
23100	0.374	0.626	0.00466	0.299	4480	1490	1890	9340	18600
26200	0.450	0.550	0.00412	0.339	5070	1690	2130	10600	21000
29600	0.531	0.469	0.00364	0.383	5740	1910	2420	12000	23800
33600	0.601	0.399	0.00321	0.435	6510	2170	2740	13600	27000
37900	0.658	0.342	0.00285	0.490	7340	2450	3090	15300	30400
42900	0.719	0.281	0.00251	0.555	8310	2770	3500	17300	34500
48500	0.779	0.221	0.00222	0.627	9390	3130	3950	19600	38900
54800	0.838	0.162	0.00197	0.710	10600	3540	4470	22100	44000

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	14m	un-	Host Plug	
Depth, meters:	687.10	stressed	1700psi	na
Klinkenberg Permeability, md:		n/a	0.0019	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.020	0.011	-
maximum Sb/Pc, fraction:		0.00004		
R35, microns:		0.0049		
R50 (median pore throat radius):		0.0038		

J values calculated using the Swanson permeability

MERCURY INJECTION

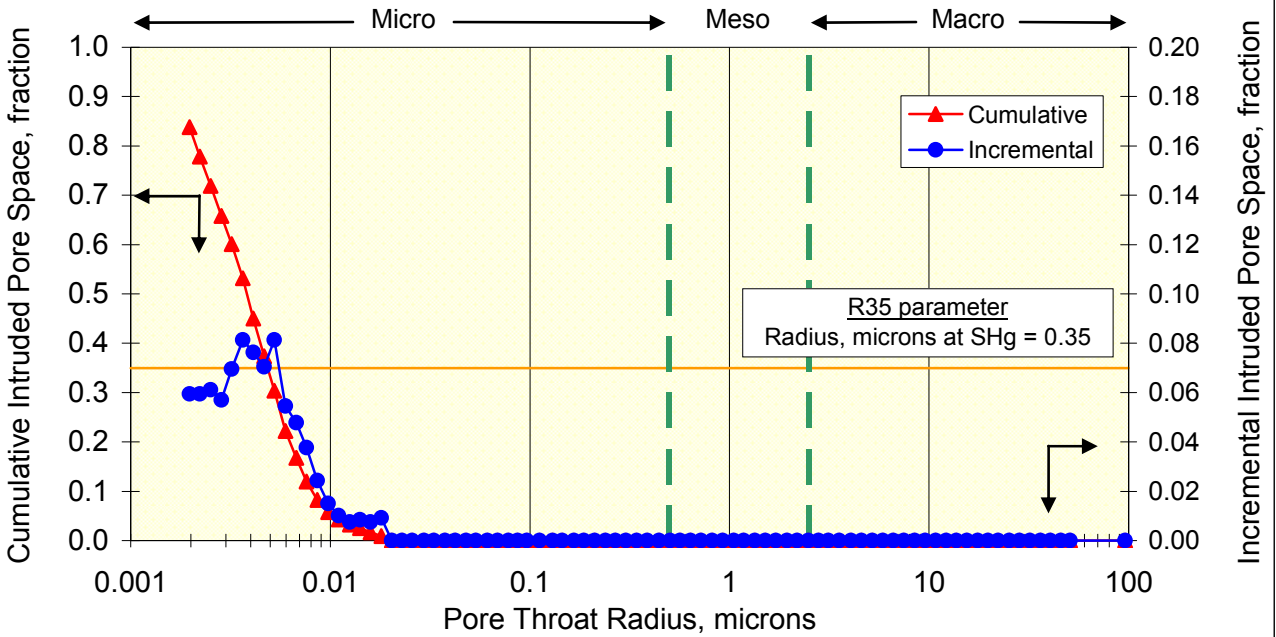


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

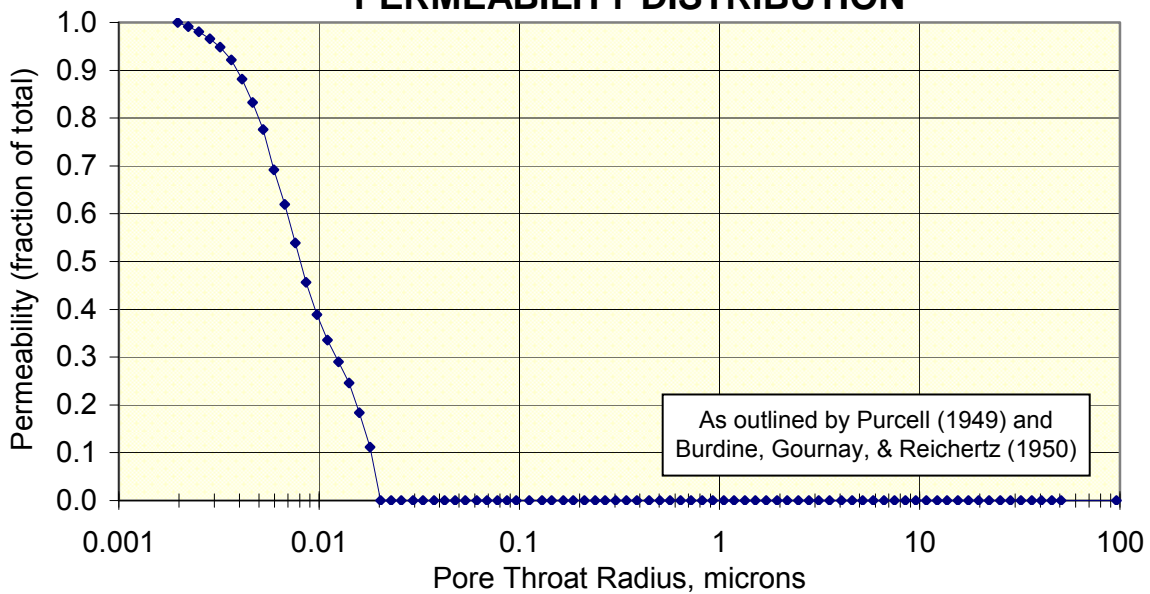
Sample:	14m	un-	Host Plug	
Depth, meters:	687.10	stressed	1700psi	na
Klinkenberg Permeability, md:	n/a	n/a	0.0019	-
Permeability to Air, md:	n/a	n/a	-	-
Swanson Permeability, md:	0.00001	0.00001	-	-
Total Porosity, fraction:	0.020	0.020	0.011	-
maximum Sb/Pc, fraction:	0.00004	0.00004		
R35, microns:	0.0049	0.0049		
R50 (median pore throat radius):	0.0038	0.0038		

J values calculated using the Swanson permeability

PORE THROAT RADIUS DISTRIBUTION



PERMEABILITY DISTRIBUTION

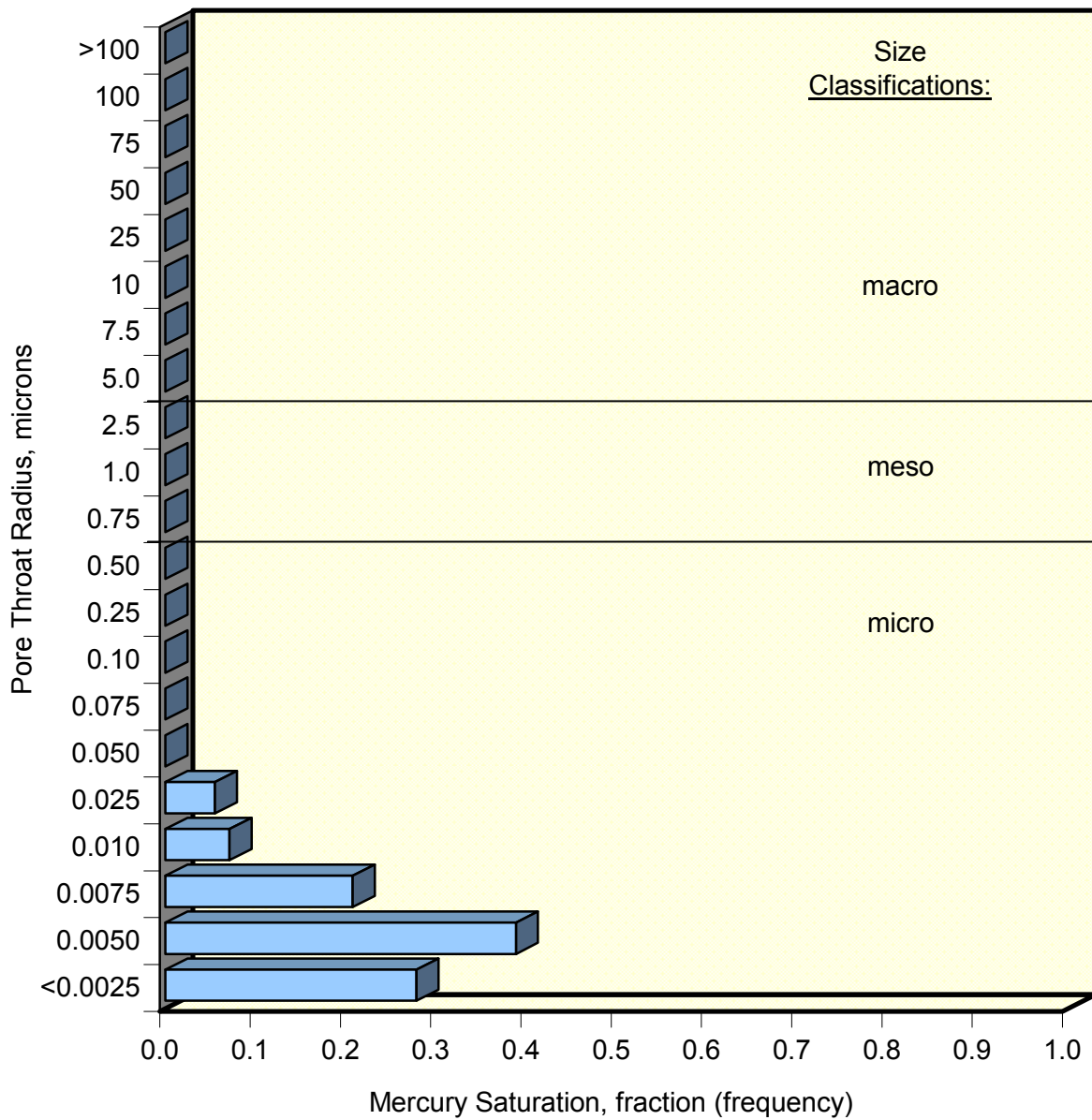


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	14m	un-	Host Plug	
Depth, meters:	687.10	stressed	1700psi	na
Klinkenberg Permeability, md:		n/a	0.0019	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.020	0.011	-
maximum Sb/Pc, fraction:		0.00004		
R35, microns:		0.0049		
R50 (median pore throat radius):		0.0038		

J values calculated using the Swanson permeability

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	15m	un-	Host Plug	
Depth, meters:	696.05	stressed	1725psi	na
Klinkenberg Permeability, md:		0.008	0.0023	-
Permeability to Air, md:		0.027	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.008	0.011	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0086		
R50 (median pore throat radius):		0.0062		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.18	0.000	1.000	91.3	0.000675	0.229	0.0762	0.0963	0.478	0.949
2.18	0.000	1.000	49.4	0.00125	0.422	0.141	0.178	0.880	1.75
2.45	0.000	1.000	44.0	0.00140	0.475	0.158	0.200	0.991	1.97
2.74	0.000	1.000	39.3	0.00157	0.531	0.177	0.224	1.11	2.21
3.08	0.000	1.000	35.0	0.00176	0.597	0.199	0.251	1.24	2.47
3.47	0.000	1.000	31.1	0.00198	0.672	0.224	0.283	1.40	2.79
3.90	0.000	1.000	27.6	0.00223	0.756	0.252	0.318	1.58	3.13
4.37	0.000	1.000	24.7	0.00250	0.847	0.282	0.357	1.77	3.52
4.91	0.000	1.000	21.9	0.00281	0.952	0.317	0.401	1.99	3.95
5.53	0.000	1.000	19.5	0.00316	1.07	0.357	0.451	2.23	4.44
6.21	0.000	1.000	17.4	0.00355	1.20	0.401	0.507	2.50	5.00
6.99	0.000	1.000	15.4	0.00400	1.35	0.452	0.570	2.82	5.62
7.89	0.000	1.000	13.7	0.00451	1.53	0.510	0.644	3.19	6.34
8.90	0.000	1.000	12.1	0.00509	1.72	0.575	0.726	3.59	7.15
10.1	0.000	1.000	10.7	0.00575	1.95	0.649	0.820	4.07	8.08
11.3	0.000	1.000	9.51	0.00648	2.20	0.732	0.924	4.59	9.10
12.8	0.000	1.000	8.41	0.00733	2.48	0.827	1.05	5.17	10.3
14.5	0.000	1.000	7.44	0.00828	2.81	0.935	1.18	5.86	11.6
16.3	0.000	1.000	6.61	0.00933	3.16	1.05	1.33	6.59	13.1
18.5	0.000	1.000	5.84	0.0106	3.58	1.19	1.51	7.47	14.9
20.8	0.000	1.000	5.18	0.0119	4.03	1.34	1.70	8.40	16.7
23.5	0.000	1.000	4.58	0.0135	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.0152	5.16	1.72	2.17	10.8	21.4
30.4	0.000	1.000	3.54	0.0174	5.90	1.97	2.48	12.3	24.4
34.6	0.000	1.000	3.12	0.0198	6.70	2.23	2.82	14.0	27.8
39.0	0.000	1.000	2.76	0.0223	7.56	2.52	3.18	15.8	31.3
44.0	0.000	1.000	2.45	0.0252	8.53	2.84	3.59	17.8	35.4
49.4	0.000	1.000	2.18	0.0282	9.57	3.19	4.03	20.0	39.7
55.9	0.000	1.000	1.93	0.0320	10.8	3.61	4.56	22.5	44.9
62.8	0.000	1.000	1.71	0.0359	12.2	4.06	5.13	25.4	50.5
71.6	0.000	1.000	1.50	0.0410	13.9	4.63	5.84	29.0	57.5
80.4	0.000	1.000	1.34	0.0460	15.6	5.19	6.56	32.5	64.6
90.8	0.000	1.000	1.19	0.0519	17.6	5.86	7.40	36.7	72.9
103	0.000	1.000	1.05	0.0588	19.9	6.64	8.39	41.5	82.7

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	15m	un-	Host Plug	
Depth, meters:	696.05	stressed	1725psi	na
Klinkenberg Permeability, md:		0.008	0.0023	-
Permeability to Air, md:		0.027	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.008	0.011	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0086		
R50 (median pore throat radius):		0.0062		

NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.000	1.000	0.930	0.0663	22.5	7.49	9.45	46.9	93.1
132	0.000	1.000	0.817	0.0755	25.6	8.52	10.8	53.4	106
149	0.000	1.000	0.723	0.0852	28.9	9.62	12.2	60.3	120
168	0.000	1.000	0.640	0.0963	32.6	10.9	13.7	68.0	135
191	0.000	1.000	0.565	0.109	37.0	12.3	15.6	77.2	154
214	0.000	1.000	0.503	0.122	41.5	13.8	17.5	86.5	172
242	0.000	1.000	0.445	0.139	46.9	15.6	19.8	97.8	195
275	0.000	1.000	0.392	0.157	53.3	17.8	22.4	111	221
311	0.000	1.000	0.346	0.178	60.3	20.1	25.4	126	250
353	0.000	1.000	0.305	0.202	68.4	22.8	28.8	143	284
398	0.000	1.000	0.271	0.228	77.1	25.7	32.5	161	320
451	0.000	1.000	0.239	0.258	87.3	29.1	36.8	182	363
507	0.000	1.000	0.212	0.290	98.3	32.8	41.4	205	408
576	0.000	1.000	0.187	0.330	112	37.2	47.0	234	463
650	0.000	1.000	0.166	0.372	126	42.0	53.0	263	522
734	0.000	1.000	0.147	0.420	142	47.4	59.9	296	590
832	0.000	1.000	0.129	0.476	161	53.8	67.9	336	669
940	0.000	1.000	0.115	0.538	182	60.7	76.7	380	756
1080	0.000	1.000	0.0996	0.619	210	69.9	88.2	438	869
1210	0.000	1.000	0.0890	0.692	235	78.2	98.7	490	972
1380	0.000	1.000	0.0781	0.789	267	89.1	113	557	1110
1550	0.000	1.000	0.0697	0.885	300	99.9	126	626	1240
1750	0.000	1.000	0.0616	1.00	339	113	143	707	1410
1970	0.000	1.000	0.0546	1.13	382	127	161	797	1590
2250	0.000	1.000	0.0479	1.29	436	145	183	909	1800
2520	0.000	1.000	0.0428	1.44	488	163	206	1020	2030
2850	0.014	0.986	0.0378	1.63	552	184	233	1150	2300
3220	0.025	0.975	0.0334	1.84	624	208	263	1300	2590
3650	0.040	0.960	0.0295	2.09	708	236	298	1480	2940
4160	0.052	0.948	0.0259	2.38	807	269	340	1680	3350
4680	0.065	0.935	0.0230	2.68	908	303	382	1890	3760
5270	0.085	0.915	0.0204	3.02	1020	341	430	2130	4240
5970	0.104	0.896	0.0181	3.41	1160	386	487	2420	4800
6740	0.126	0.874	0.0160	3.86	1310	436	550	2730	5420

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	15m	un-	Host Plug	
Depth, meters:	696.05	stressed	1725psi	na
Klinkenberg Permeability, md:		0.008	0.0023	-
Permeability to Air, md:		0.027	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.008	0.011	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0086		
R50 (median pore throat radius):		0.0062		

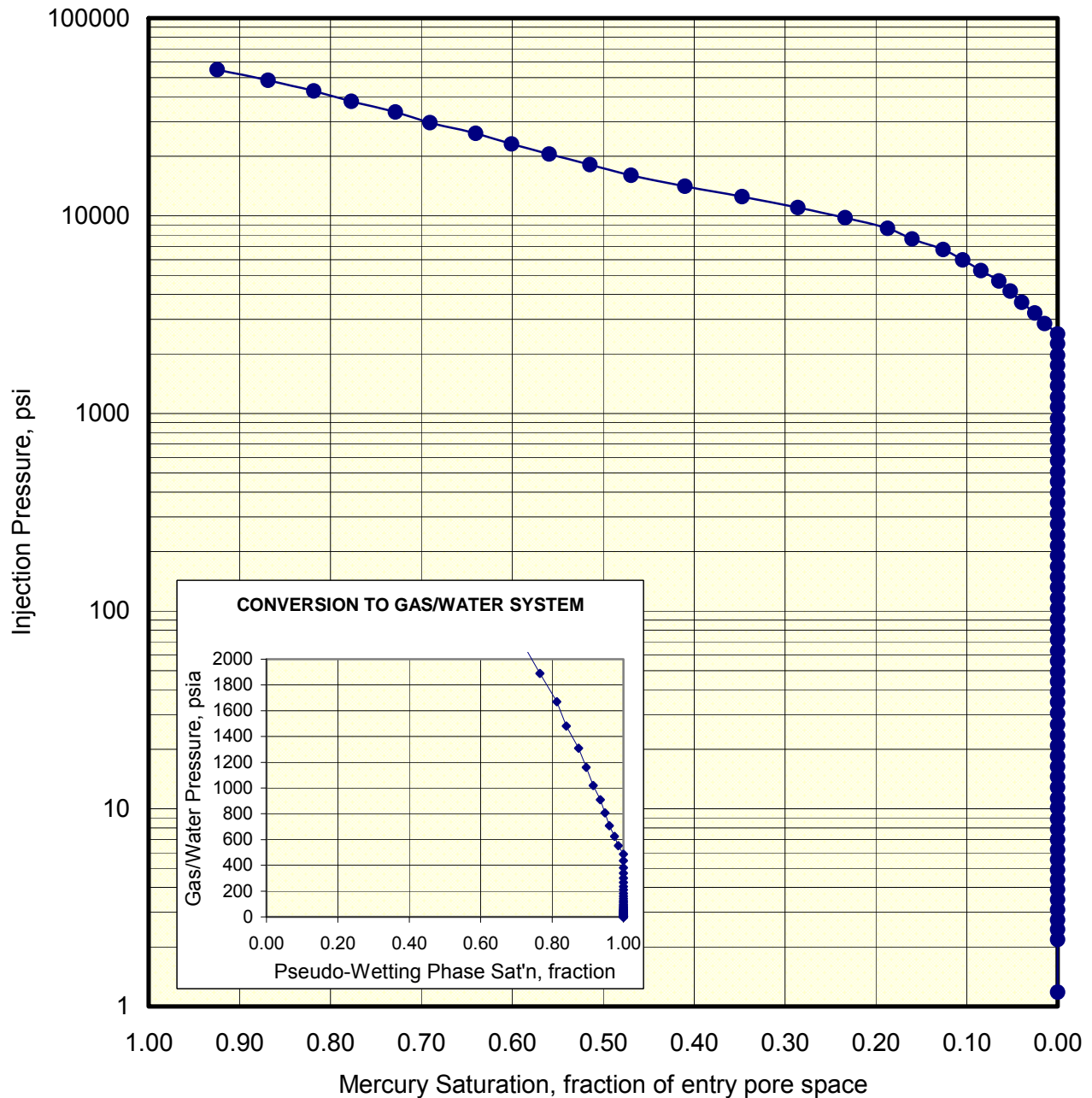
NOTE: Extreme difficulty in injecting mercury combined with sample compressibility and small to very small pore volumes reduces certainty during evaluation of these data

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.160	0.840	0.0141	4.37	1480	493	623	3090	6140
8630	0.187	0.813	0.0125	4.94	1670	558	704	3480	6940
9770	0.234	0.766	0.0110	5.59	1890	631	797	3940	7850
11000	0.286	0.714	0.00976	6.32	2140	713	901	4460	8880
12500	0.347	0.653	0.00863	7.14	2420	807	1020	5050	10000
14100	0.410	0.590	0.00762	8.09	2740	913	1150	5710	11300
16000	0.469	0.531	0.00674	9.14	3100	1030	1300	6460	12800
18100	0.514	0.486	0.00595	10.4	3510	1170	1480	7320	14600
20500	0.559	0.441	0.00527	11.7	3970	1320	1670	8280	16500
23100	0.601	0.399	0.00466	13.2	4480	1490	1890	9340	18600
26100	0.640	0.360	0.00412	15.0	5070	1690	2130	10600	21000
29600	0.691	0.309	0.00364	16.9	5730	1910	2410	11900	23700
33500	0.728	0.272	0.00322	19.1	6480	2160	2730	13500	26900
37900	0.777	0.223	0.00284	21.7	7340	2450	3090	15300	30400
42800	0.818	0.182	0.00252	24.5	8300	2770	3490	17300	34400
48500	0.869	0.131	0.00222	27.7	9400	3130	3960	19600	39000
54900	0.924	0.076	0.00196	31.4	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	15m	un-	Host Plug	
Depth, meters:	696.05	stressed	1725psi	na
Klinkenberg Permeability, md:		0.008	0.0023	-
Permeability to Air, md:		0.027	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.008	0.011	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0086		
R50 (median pore throat radius):		0.0062		

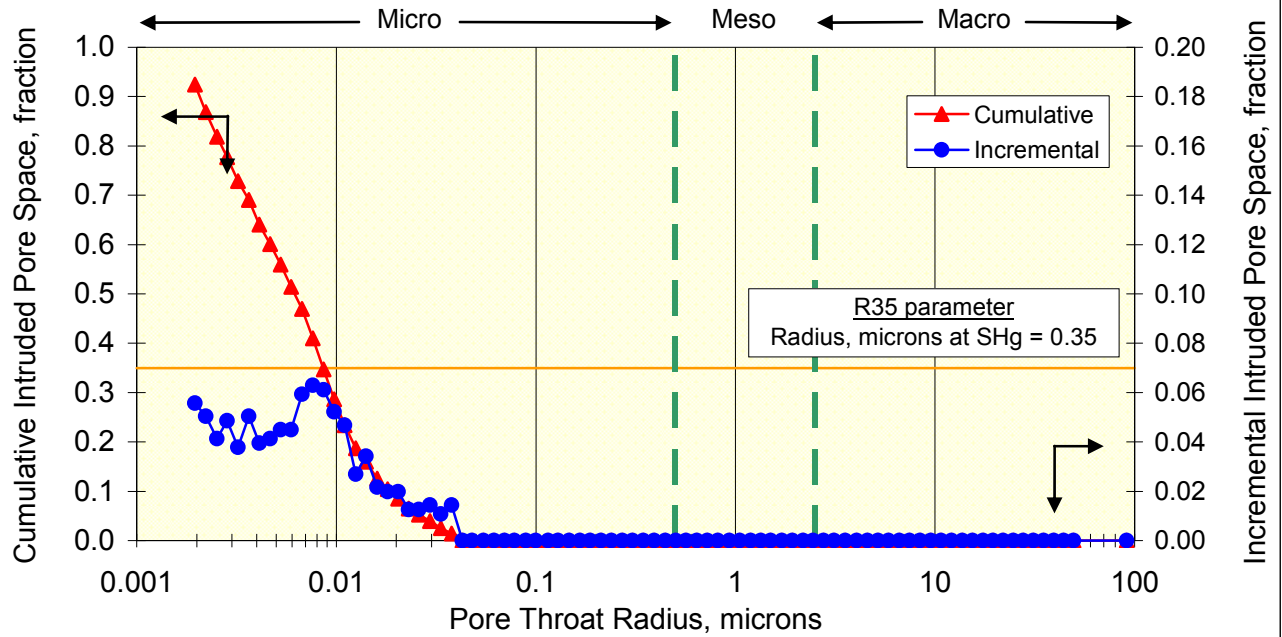
MERCURY INJECTION



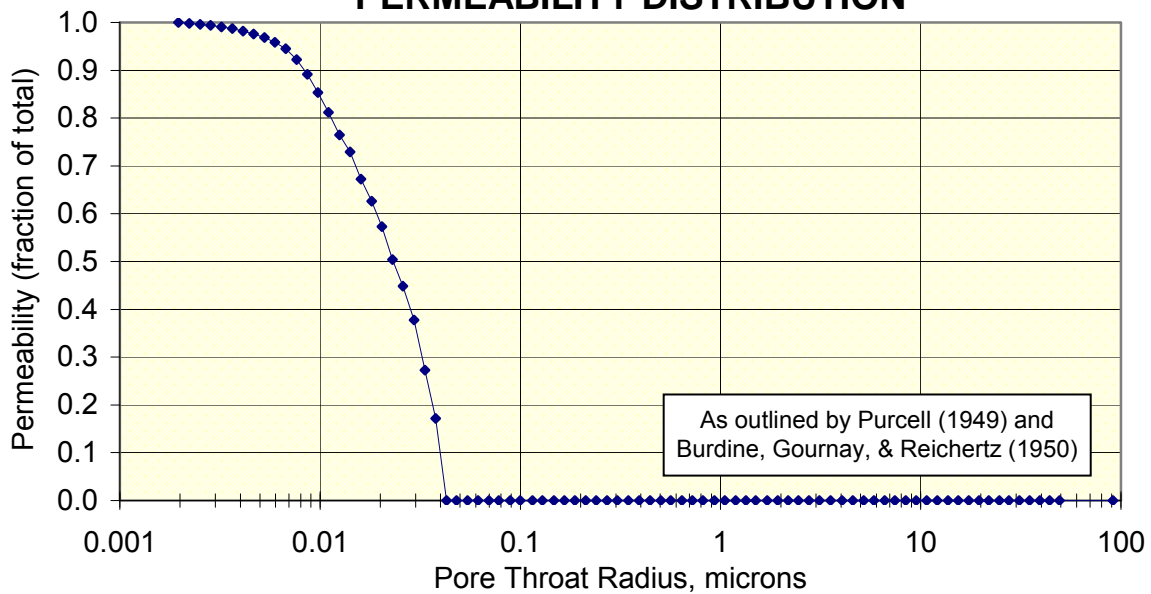
Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	15m	un-	Host Plug	
Depth, meters:	696.05	stressed	1725psi	na
Klinkenberg Permeability, md:	0.008	0.0023	-	-
Permeability to Air, md:	0.027	-	-	-
Swanson Permeability, md:	0.00001	-	-	-
Total Porosity, fraction:	0.008	0.011	-	-
maximum Sb/Pc, fraction:	0.00002			
R35, microns:	0.0086			
R50 (median pore throat radius):	0.0062			

PORE THROAT RADIUS DISTRIBUTION



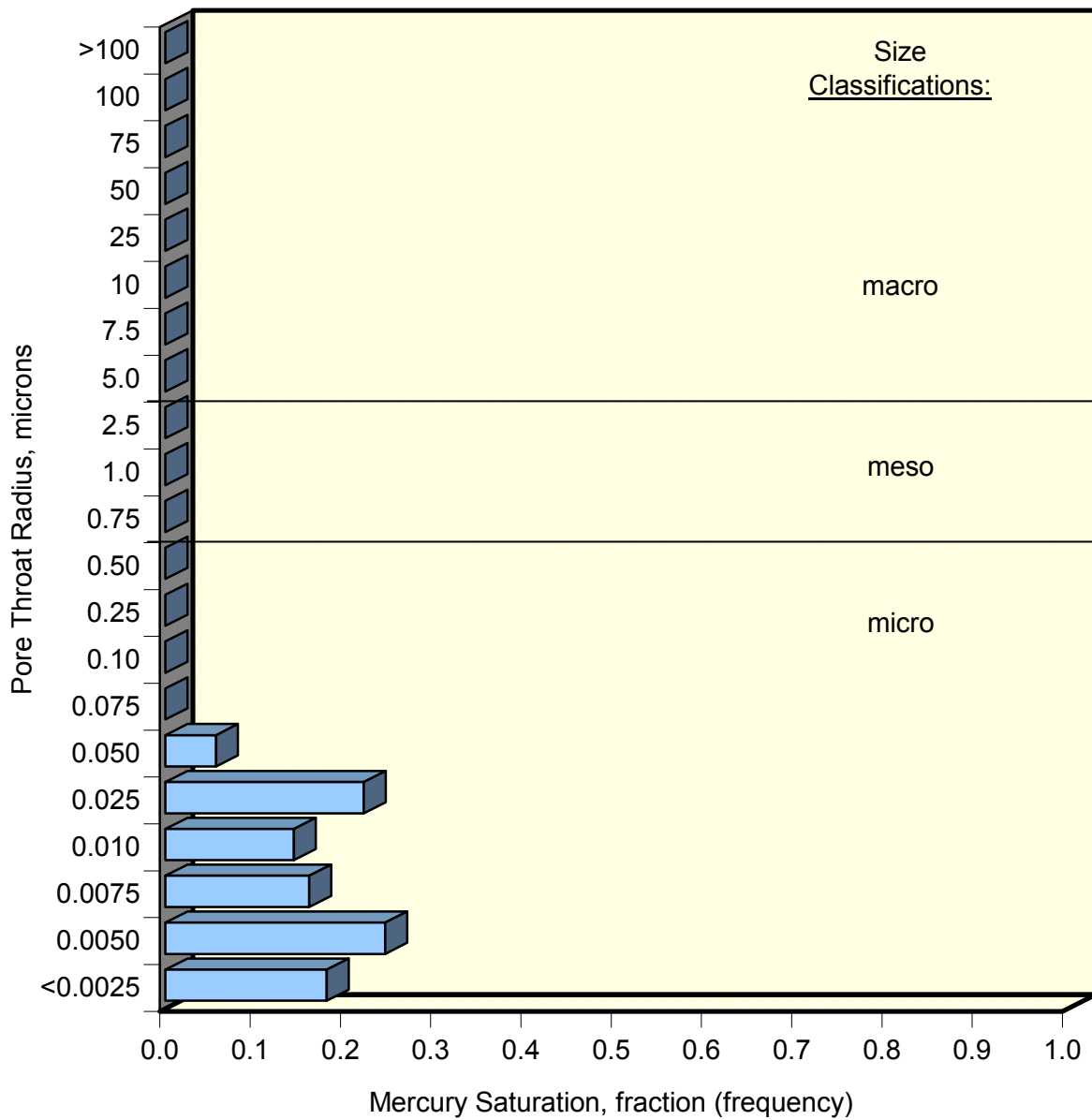
PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	15m	un-	Host Plug	
Depth, meters:	696.05	stressed	1725psi	na
Klinkenberg Permeability, md:		0.008	0.0023	-
Permeability to Air, md:		0.027	-	-
Swanson Permeability, md:		0.00001	-	-
Total Porosity, fraction:		0.008	0.011	-
maximum Sb/Pc, fraction:		0.00002		
R35, microns:		0.0086		
R50 (median pore throat radius):		0.0062		

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	19m	un-	Host Plug	
Depth, meters:	818.61	stressed	2025psi	na
Klinkenberg Permeability, md:		n/a	0.162	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.472	-	-
Total Porosity, fraction:		0.116	0.016	-
maximum Sb/Pc, fraction:		0.019		
R35, microns:		0.495		
R50 (median pore throat radius):		0.274		

J values calculated using the Swanson permeability

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.19	0.000	1.000	90.5	0.00140	0.231	0.0769	0.0971	0.482	0.957
2.18	0.000	1.000	49.4	0.00257	0.422	0.141	0.178	0.880	1.75
2.45	0.000	1.000	44.0	0.00289	0.475	0.158	0.200	0.991	1.97
2.74	0.000	1.000	39.3	0.00323	0.531	0.177	0.224	1.11	2.21
3.08	0.000	1.000	35.0	0.00363	0.597	0.199	0.251	1.24	2.47
3.48	0.000	1.000	31.0	0.00410	0.674	0.225	0.284	1.41	2.80
3.91	0.000	1.000	27.6	0.00460	0.758	0.253	0.319	1.58	3.14
4.37	0.000	1.000	24.7	0.00515	0.847	0.282	0.357	1.77	3.52
4.91	0.000	1.000	21.9	0.00578	0.952	0.317	0.401	1.99	3.95
5.54	0.000	1.000	19.4	0.00652	1.07	0.358	0.452	2.23	4.45
6.21	0.000	1.000	17.4	0.00731	1.20	0.401	0.507	2.50	5.00
6.99	0.000	1.000	15.4	0.00823	1.35	0.452	0.570	2.82	5.62
7.90	0.000	1.000	13.6	0.00930	1.53	0.510	0.645	3.19	6.35
8.91	0.000	1.000	12.1	0.0105	1.73	0.576	0.727	3.61	7.16
10.1	0.000	1.000	10.7	0.0118	1.95	0.650	0.821	4.07	8.09
11.3	0.000	1.000	9.50	0.0134	2.20	0.733	0.925	4.59	9.11
12.8	0.000	1.000	8.42	0.0151	2.48	0.826	1.04	5.17	10.2
14.5	0.000	1.000	7.45	0.0170	2.80	0.934	1.18	5.84	11.6
16.3	0.000	1.000	6.61	0.0192	3.16	1.05	1.33	6.59	13.1
18.5	0.000	1.000	5.84	0.0217	3.58	1.19	1.51	7.47	14.9
20.9	0.000	1.000	5.17	0.0246	4.04	1.35	1.70	8.43	16.7
23.5	0.000	1.000	4.58	0.0277	4.56	1.52	1.92	9.51	18.9
26.6	0.000	1.000	4.05	0.0313	5.16	1.72	2.17	10.8	21.4
30.6	0.000	1.000	3.52	0.0360	5.93	1.98	2.50	12.4	24.6
34.6	0.000	1.000	3.11	0.0408	6.71	2.24	2.82	14.0	27.8
41.0	0.000	1.000	2.63	0.0483	7.95	2.65	3.34	16.6	32.9
43.5	0.000	1.000	2.48	0.0512	8.42	2.81	3.54	17.6	34.9
49.6	0.000	1.000	2.17	0.0585	9.62	3.21	4.05	20.1	39.9
56.2	0.000	1.000	1.92	0.0661	10.9	3.63	4.58	22.7	45.1
63.2	0.000	1.000	1.70	0.0745	12.3	4.09	5.16	25.7	50.8
71.0	0.010	0.990	1.52	0.0836	13.8	4.58	5.79	28.8	57.0
80.8	0.035	0.965	1.33	0.0952	15.7	5.22	6.59	32.7	64.9
91.0	0.054	0.946	1.18	0.107	17.6	5.88	7.42	36.7	73.1
105	0.077	0.923	1.03	0.123	20.3	6.77	8.55	42.3	84.2

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	19m	un-	Host Plug	
Depth, meters:	818.61	stressed	2025psi	na
Klinkenberg Permeability, md:		n/a	0.162	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.472	-	-
Total Porosity, fraction:		0.116	0.016	-
maximum Sb/Pc, fraction:		0.019		
R35, microns:		0.495		
R50 (median pore throat radius):		0.274		

J values calculated using the Swanson permeability

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
117	0.106	0.894	0.924	0.137	22.6	7.53	9.51	47.1	93.7
132	0.141	0.859	0.818	0.155	25.5	8.51	10.7	53.2	105
148	0.179	0.821	0.727	0.175	28.7	9.58	12.1	59.9	119
168	0.239	0.761	0.641	0.198	32.6	10.9	13.7	68.0	135
190	0.298	0.702	0.567	0.224	36.8	12.3	15.5	76.7	153
214	0.345	0.655	0.503	0.252	41.5	13.8	17.5	86.5	172
242	0.384	0.616	0.444	0.286	47.0	15.7	19.8	98	195
275	0.418	0.582	0.392	0.324	53.2	17.7	22.4	111	221
312	0.450	0.550	0.345	0.368	60.5	20.2	25.5	126	251
351	0.476	0.524	0.307	0.414	68.1	22.7	28.7	142	283
398	0.502	0.498	0.271	0.469	77.1	25.7	32.5	161	320
449	0.527	0.473	0.240	0.529	87.0	29.0	36.6	181	361
509	0.554	0.446	0.212	0.600	98.7	32.9	41.6	206	410
575	0.583	0.417	0.187	0.678	112	37.2	46.9	234	462
648	0.621	0.379	0.166	0.763	126	41.9	52.9	263	521
735	0.666	0.334	0.147	0.865	142	47.5	60.0	296	591
833	0.709	0.291	0.129	0.981	161	53.8	68.0	336	670
944	0.745	0.255	0.114	1.11	183	61.0	77.0	382	759
1080	0.781	0.219	0.0997	1.27	209	69.8	88.1	436	868
1220	0.805	0.195	0.0886	1.43	236	78.6	99.3	492	978
1370	0.825	0.175	0.0785	1.62	266	88.6	112	555	1100
1540	0.844	0.156	0.0699	1.82	299	99.6	126	624	1240
1750	0.862	0.138	0.0616	2.06	339	113	143	707	1410
1970	0.885	0.115	0.0547	2.32	382	127	161	797	1590
2250	0.901	0.099	0.0478	2.65	437	146	184	911	1810
2530	0.916	0.084	0.0426	2.98	490	163	206	1020	2030
2850	0.929	0.071	0.0378	3.36	552	184	233	1150	2300
3220	0.939	0.061	0.0334	3.79	624	208	263	1300	2590
3650	0.946	0.054	0.0296	4.29	707	236	297	1470	2930
4180	0.951	0.049	0.0258	4.92	809	270	341	1690	3360
4680	0.954	0.046	0.023	5.51	907	302	382	1890	3760
5270	0.958	0.042	0.0204	6.21	1020	340	430	2130	4240
5970	0.962	0.038	0.0181	7.02	1160	385	487	2420	4800
6740	0.964	0.036	0.0160	7.94	1310	436	550	2730	5420

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	19m	un-	Host Plug	
Depth, meters:	818.61	stressed	2025psi	na
Klinkenberg Permeability, md:		n/a	0.162	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.472	-	-
Total Porosity, fraction:		0.116	0.016	-
maximum Sb/Pc, fraction:		0.019		
R35, microns:		0.495		
R50 (median pore throat radius):		0.274		

J values calculated using the Swanson permeability

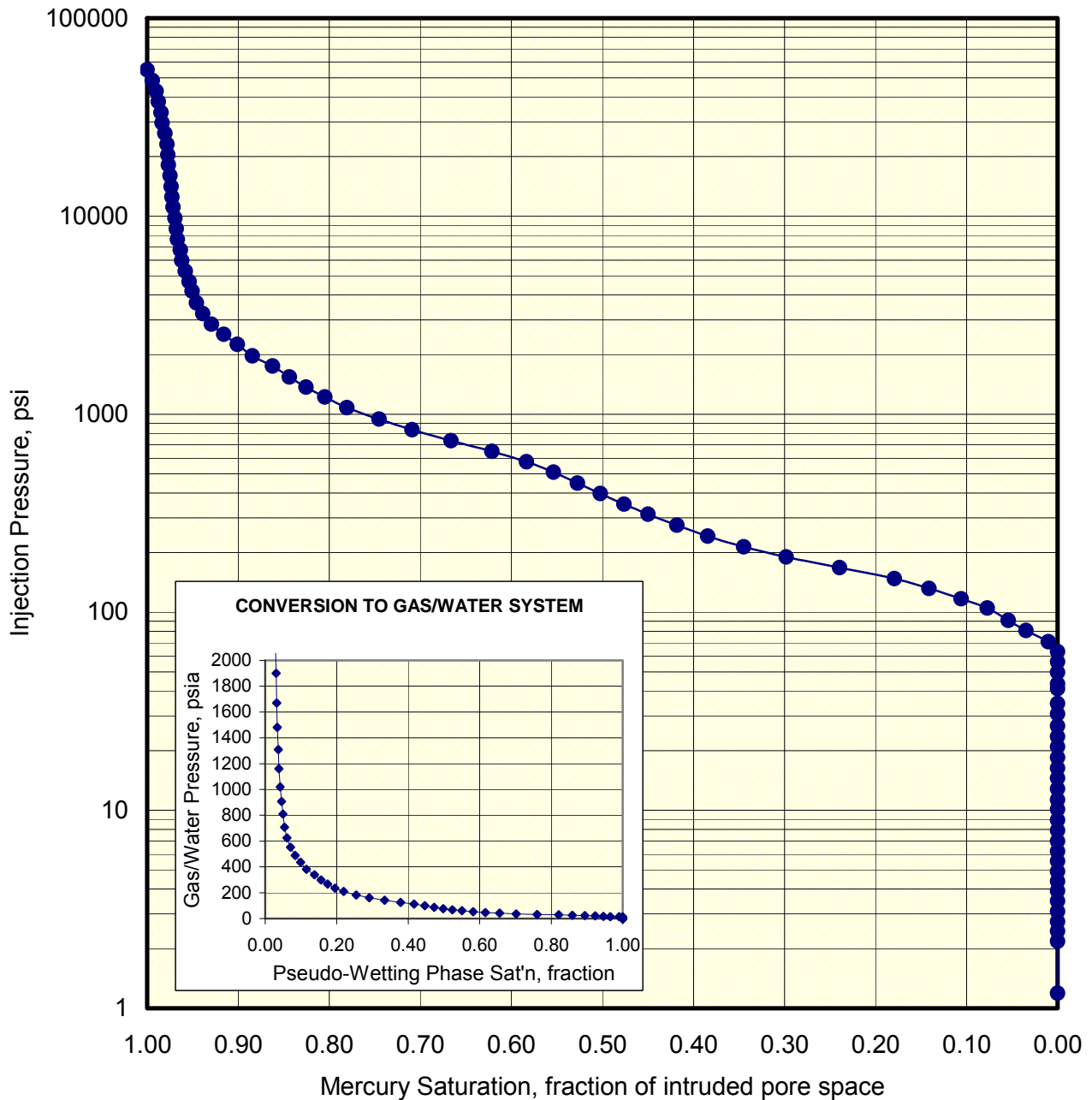
Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7630	0.967	0.033	0.0141	8.98	1480	493	622	3090	6130
8640	0.968	0.032	0.0125	10.2	1670	558	705	3480	6950
9790	0.969	0.031	0.0110	11.5	1900	632	799	3960	7870
11100	0.972	0.028	0.00973	13.0	2150	715	903	4480	8900
12500	0.973	0.027	0.00862	14.7	2420	807	1020	5050	10000
14100	0.974	0.026	0.00763	16.6	2740	912	1150	5710	11300
16000	0.975	0.025	0.00674	18.8	3100	1030	1300	6460	12800
18100	0.977	0.023	0.00595	21.3	3510	1170	1480	7320	14600
20400	0.977	0.023	0.00527	24.1	3960	1320	1670	8260	16500
23100	0.978	0.022	0.00466	27.2	4480	1490	1890	9340	18600
26200	0.981	0.019	0.00412	30.8	5070	1690	2140	10600	21100
29600	0.984	0.016	0.00364	34.8	5730	1910	2410	11900	23700
33400	0.985	0.015	0.00322	39.4	6480	2160	2730	13500	26900
37900	0.988	0.012	0.00284	44.6	7350	2450	3090	15300	30400
42800	0.990	0.010	0.00252	50.4	8290	2760	3490	17300	34400
48500	0.994	0.006	0.00222	57.2	9410	3140	3960	19600	39000
54900	1.000	0.000	0.00196	64.7	10600	3550	4480	22100	44100

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	19m	un-	Host Plug	
Depth, meters:	818.61	stressed	2025psi	na
Klinkenberg Permeability, md:	n/a		0.162	-
Permeability to Air, md:	n/a		-	-
Swanson Permeability, md:	0.472		-	-
Total Porosity, fraction:	0.116		0.016	-
maximum Sb/Pc, fraction:	0.019			
R35, microns:	0.495			
R50 (median pore throat radius):	0.274			

J values calculated using the Swanson permeability

MERCURY INJECTION

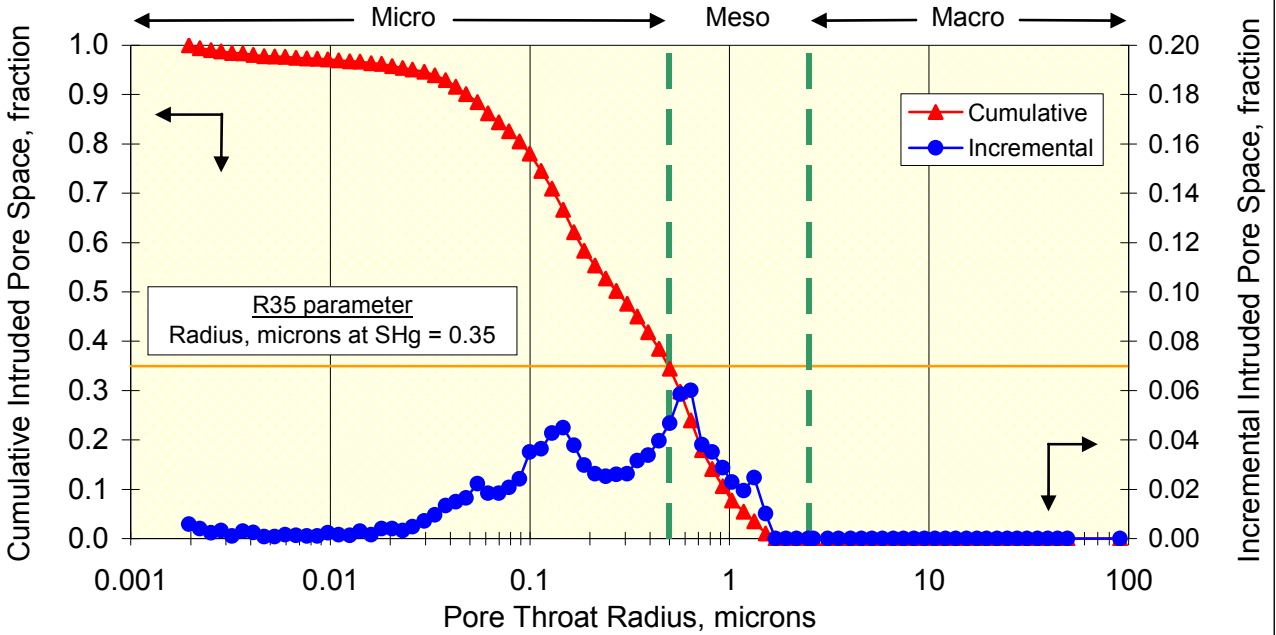


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

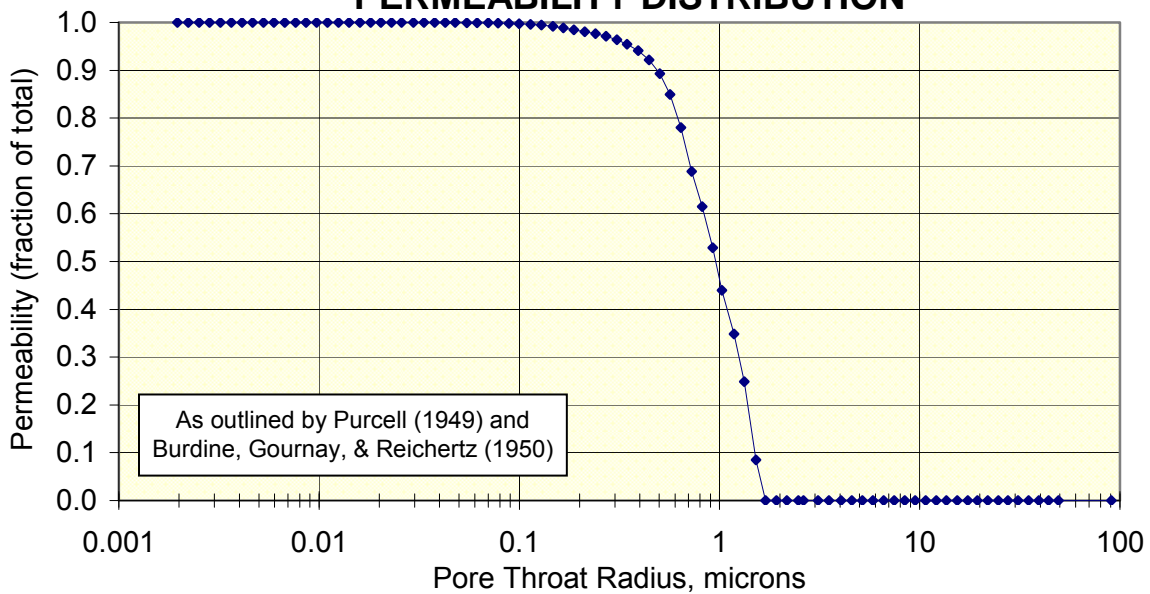
Sample:	19m	un-	Host Plug	
Depth, meters:	818.61	stressed	2025psi	na
Klinkenberg Permeability, md:		n/a	0.162	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.472	-	-
Total Porosity, fraction:		0.116	0.016	-
maximum Sb/Pc, fraction:		0.019		
R35, microns:		0.495		
R50 (median pore throat radius):		0.274		

J values calculated using the Swanson permeability

PORE THROAT RADIUS DISTRIBUTION



PERMEABILITY DISTRIBUTION

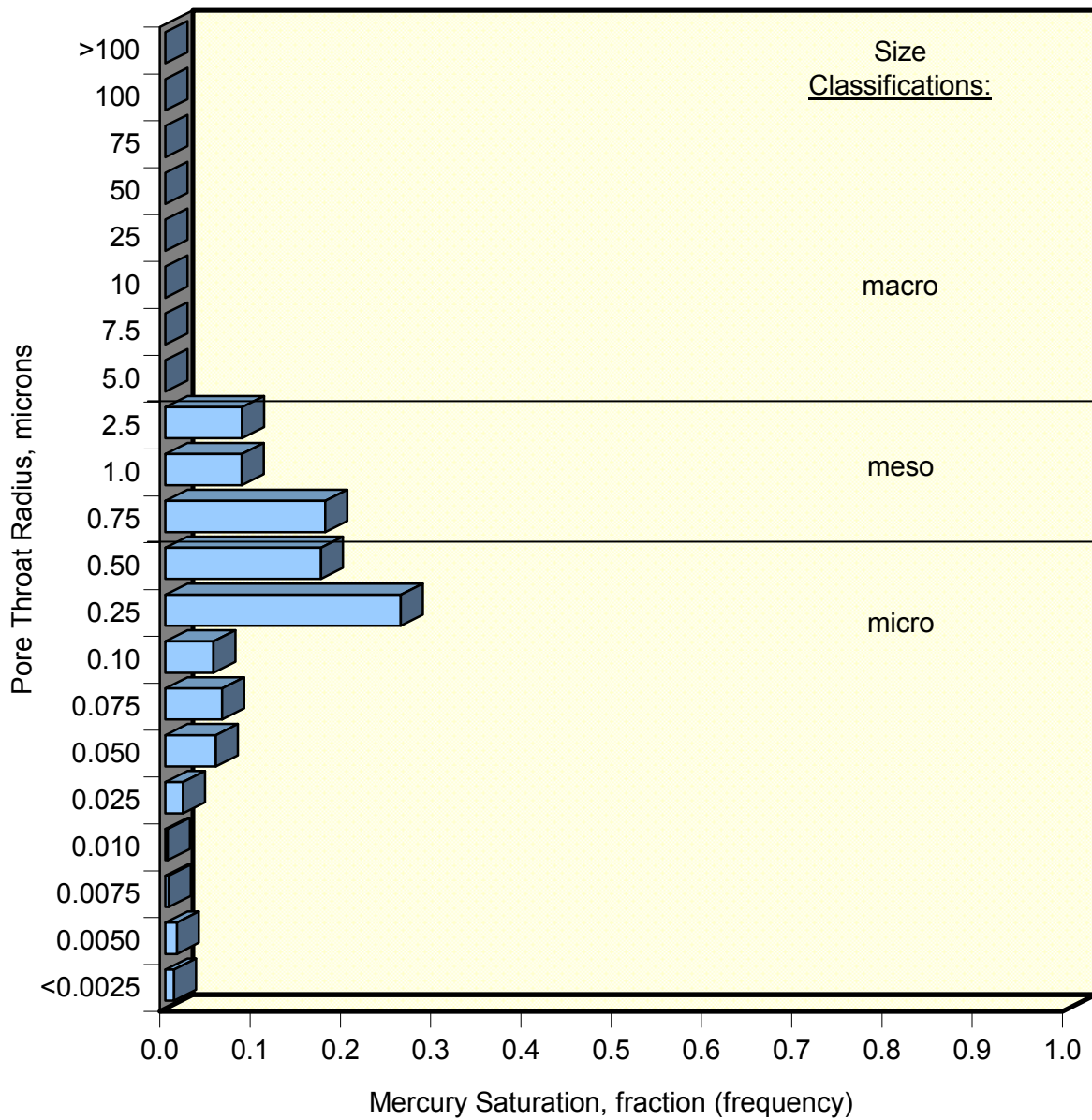


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	19m	un-	Host Plug	
Depth, meters:	818.61	stressed	2025psi	na
Klinkenberg Permeability, md:		n/a	0.162	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		0.472	-	-
Total Porosity, fraction:		0.116	0.016	-
maximum Sb/Pc, fraction:		0.019		
R35, microns:		0.495		
R50 (median pore throat radius):		0.274		

J values calculated using the Swanson permeability

PORE THROAT SIZE HISTOGRAM



MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	20m	un-	Host Plug	
Depth, meters:	845.96	stressed	2100psi	na
Klinkenberg Permeability, md:		n/a	0.126	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		1.63	-	-
Total Porosity, fraction:		0.108	0.043	-
maximum Sb/Pc, fraction:		0.039		
R35, microns:		0.684		
R50 (median pore throat radius):		0.269		

J values calculated using the Swanson permeability

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
1.10	0.000	1.000	97.9	0.00249	0.213	0.0711	0.0897	0.444	0.884
2.11	0.000	1.000	51.1	0.00477	0.409	0.136	0.172	0.853	1.69
2.37	0.000	1.000	45.5	0.00536	0.459	0.153	0.193	0.957	1.90
2.67	0.000	1.000	40.4	0.00604	0.517	0.172	0.218	1.08	2.15
2.99	0.000	1.000	36.0	0.00676	0.579	0.193	0.244	1.21	2.40
3.37	0.000	1.000	32.0	0.00762	0.653	0.218	0.275	1.36	2.71
3.80	0.000	1.000	28.4	0.00859	0.736	0.245	0.310	1.53	3.05
4.29	0.000	1.000	25.1	0.00970	0.831	0.277	0.350	1.73	3.45
4.83	0.000	1.000	22.3	0.0109	0.936	0.312	0.394	1.95	3.88
5.44	0.000	1.000	19.8	0.0123	1.05	0.351	0.444	2.19	4.37
6.15	0.000	1.000	17.5	0.0139	1.19	0.397	0.502	2.48	4.95
6.92	0.000	1.000	15.6	0.0156	1.34	0.447	0.565	2.79	5.57
7.83	0.000	1.000	13.8	0.0177	1.52	0.506	0.639	3.17	6.30
8.83	0.000	1.000	12.2	0.0200	1.71	0.570	0.720	3.57	7.09
9.97	0.000	1.000	10.8	0.0225	1.93	0.644	0.813	4.02	8.01
11.3	0.000	1.000	9.57	0.0255	2.18	0.727	0.919	4.55	9.05
12.7	0.007	0.993	8.46	0.0288	2.47	0.823	1.04	5.15	10.2
14.4	0.016	0.984	7.49	0.0325	2.79	0.929	1.17	5.82	11.5
16.3	0.027	0.973	6.63	0.0368	3.15	1.05	1.33	6.57	13.1
18.4	0.037	0.963	5.87	0.0415	3.56	1.19	1.50	7.42	14.8
20.8	0.056	0.944	5.19	0.0470	4.03	1.34	1.69	8.40	16.7
23.5	0.074	0.926	4.59	0.0531	4.55	1.52	1.91	9.49	18.8
26.5	0.089	0.911	4.06	0.0600	5.14	1.71	2.16	10.7	21.3
30.2	0.104	0.896	3.56	0.0683	5.86	1.95	2.47	12.2	24.3
34.2	0.121	0.879	3.15	0.0773	6.63	2.21	2.79	13.8	27.5
38.7	0.138	0.862	2.79	0.0874	7.49	2.50	3.15	15.6	31.0
43.8	0.157	0.843	2.46	0.0991	8.49	2.83	3.58	17.7	35.3
49.3	0.174	0.826	2.19	0.111	9.55	3.18	4.02	19.9	39.6
55.4	0.191	0.809	1.94	0.125	10.7	3.58	4.52	22.3	44.5
63.1	0.210	0.790	1.71	0.143	12.2	4.07	5.14	25.4	50.6
71.4	0.228	0.772	1.51	0.161	13.8	4.61	5.83	28.8	57.4
80.1	0.247	0.753	1.34	0.181	15.5	5.18	6.54	32.3	64.4
90.7	0.270	0.730	1.19	0.205	17.6	5.86	7.40	36.7	72.9
103	0.288	0.712	1.04	0.234	20.0	6.68	8.43	41.7	83.1

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	20m	un-	Host Plug	
Depth, meters:	845.96	stressed	2100psi	na
Klinkenberg Permeability, md:		n/a	0.126	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		1.63	-	-
Total Porosity, fraction:		0.108	0.043	-
maximum Sb/Pc, fraction:		0.039		
R35, microns:		0.684		
R50 (median pore throat radius):		0.269		

J values calculated using the Swanson permeability

Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
116	0.306	0.694	0.927	0.263	22.5	7.50	9.48	46.9	93.4
132	0.325	0.675	0.813	0.299	25.7	8.56	10.8	53.6	106
148	0.341	0.659	0.726	0.336	28.8	9.59	12.1	60.1	119
168	0.360	0.640	0.640	0.381	32.6	10.9	13.7	68.0	135
190	0.378	0.622	0.566	0.430	36.9	12.3	15.5	77.0	153
214	0.396	0.604	0.503	0.484	41.5	13.8	17.5	86.5	172
243	0.416	0.584	0.443	0.549	47.1	15.7	19.8	98.2	195
277	0.435	0.565	0.389	0.625	53.6	17.9	22.6	112	223
312	0.457	0.543	0.346	0.704	60.4	20.1	25.4	126	250
352	0.476	0.524	0.306	0.797	68.3	22.8	28.7	142	283
400	0.499	0.501	0.269	0.905	77.6	25.9	32.6	162	321
449	0.519	0.481	0.240	1.01	87.0	29.0	36.6	181	361
510	0.541	0.459	0.211	1.15	98.8	32.9	41.6	206	410
578	0.561	0.439	0.186	1.31	112	37.3	47.2	234	465
652	0.582	0.418	0.165	1.47	126	42.1	53.2	263	524
734	0.599	0.401	0.147	1.66	142	47.4	59.9	296	590
837	0.619	0.381	0.129	1.89	162	54.1	68.3	338	673
943	0.636	0.364	0.114	2.13	183	60.9	77.0	382	759
1090	0.656	0.344	0.0992	2.45	210	70.1	88.6	438	873
1220	0.671	0.329	0.0884	2.76	236	78.8	99.5	492	980
1380	0.688	0.312	0.0782	3.11	267	88.9	112	557	1100
1550	0.704	0.296	0.0696	3.50	300	100	126	626	1240
1760	0.721	0.279	0.0613	3.97	340	113	143	709	1410
1970	0.736	0.264	0.0547	4.46	382	127	161	797	1590
2250	0.754	0.246	0.0479	5.08	436	145	184	909	1810
2550	0.770	0.230	0.0423	5.76	494	165	208	1030	2050
2870	0.785	0.215	0.0376	6.49	556	185	234	1160	2310
3260	0.801	0.199	0.0330	7.37	632	211	266	1320	2620
3650	0.814	0.186	0.0295	8.25	707	236	298	1470	2940
4220	0.829	0.171	0.0256	9.53	817	272	344	1700	3390
4680	0.840	0.160	0.0230	10.6	907	302	382	1890	3760
5280	0.853	0.147	0.0204	11.9	1020	341	430	2130	4240
5980	0.865	0.135	0.0180	13.5	1160	386	488	2420	4810
6760	0.875	0.125	0.0159	15.3	1310	436	551	2730	5430

MERCURY INJECTION DATA SUMMARY

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	20m	un-	Host Plug	
Depth, meters:	845.96	stressed	2100psi	na
Klinkenberg Permeability, md:		n/a	0.126	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		1.63	-	-
Total Porosity, fraction:		0.108	0.043	-
maximum Sb/Pc, fraction:		0.039		
R35, microns:		0.684		
R50 (median pore throat radius):		0.269		

J values calculated using the Swanson permeability

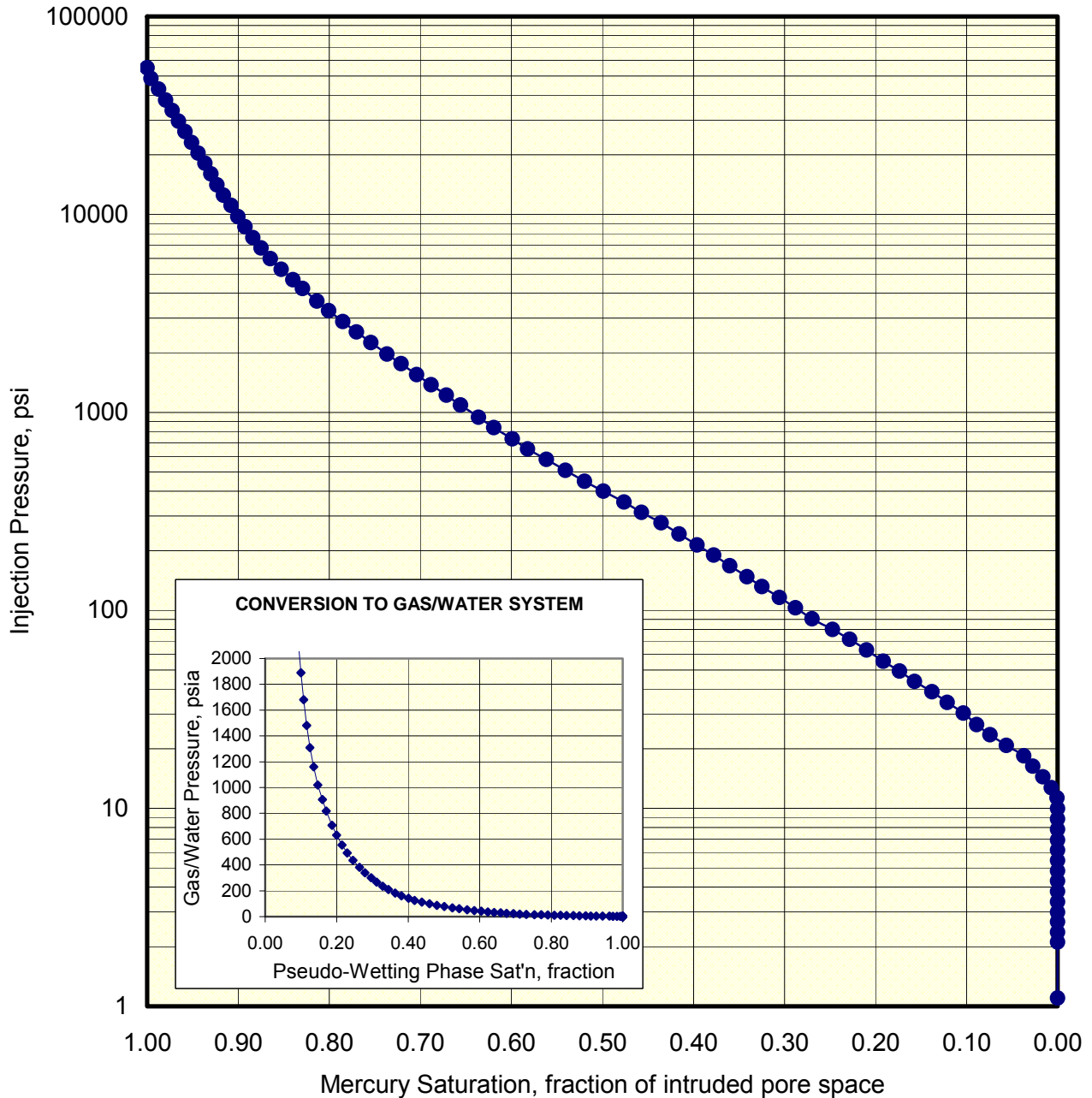
Injection Pressure, psia	Mercury Saturation, fraction	Pseudo-Wetting Saturation, fraction	Pore Throat Radius, microns	J Values	Conversion to other Laboratory Fluid Systems, psia			Estimated Height Above Free Water, feet	
					G-W	G-O	O-W	G-W	O-W
7640	0.884	0.116	0.0141	17.3	1480	493	623	3090	6140
8680	0.893	0.107	0.0124	19.6	1680	561	708	3500	6980
9760	0.900	0.100	0.0110	22.1	1890	630	796	3940	7840
11100	0.908	0.092	0.00975	25.0	2140	714	902	4460	8890
12500	0.916	0.084	0.00861	28.3	2420	808	1020	5050	10000
14100	0.923	0.077	0.00761	32.0	2740	914	1150	5710	11300
16000	0.930	0.070	0.00674	36.2	3100	1030	1300	6460	12800
18100	0.937	0.063	0.00596	40.9	3500	1170	1470	7300	14500
20400	0.944	0.056	0.00527	46.2	3960	1320	1670	8260	16500
23100	0.951	0.049	0.00466	52.3	4480	1490	1890	9340	18600
26200	0.958	0.042	0.00412	59.2	5070	1690	2130	10600	21000
29600	0.966	0.034	0.00364	66.9	5730	1910	2410	11900	23700
33500	0.973	0.027	0.00322	75.7	6490	2160	2730	13500	26900
37800	0.980	0.020	0.00285	85.5	7330	2440	3090	15300	30400
42900	0.987	0.013	0.00251	97.0	8320	2770	3500	17400	34500
48600	0.996	0.004	0.00222	110	9410	3140	3960	19600	39000
55000	1.000	0.000	0.00196	124	10700	3550	4490	22300	44200

Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	20m	un-	Host Plug	
Depth, meters:	845.96	stressed	2100psi	na
Klinkenberg Permeability, md:		n/a	0.126	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		1.63	-	-
Total Porosity, fraction:		0.108	0.043	-
maximum Sb/Pc, fraction:		0.039		
R35, microns:		0.684		
R50 (median pore throat radius):		0.269		

J values calculated using the Swanson permeability

MERCURY INJECTION

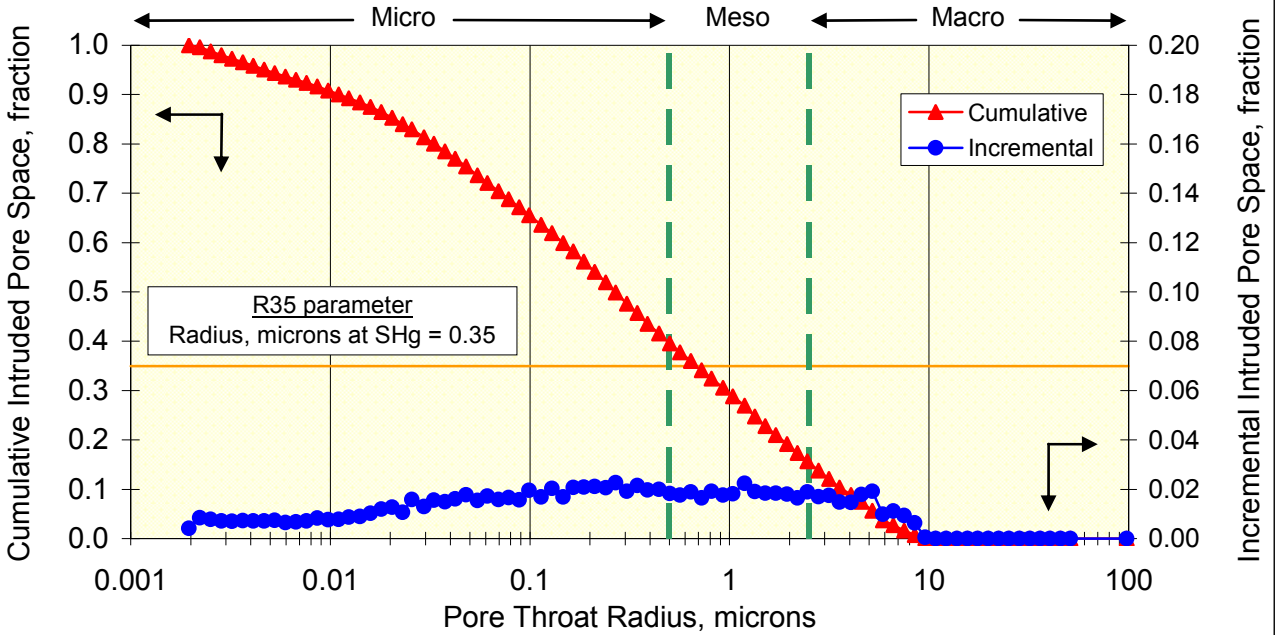


Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

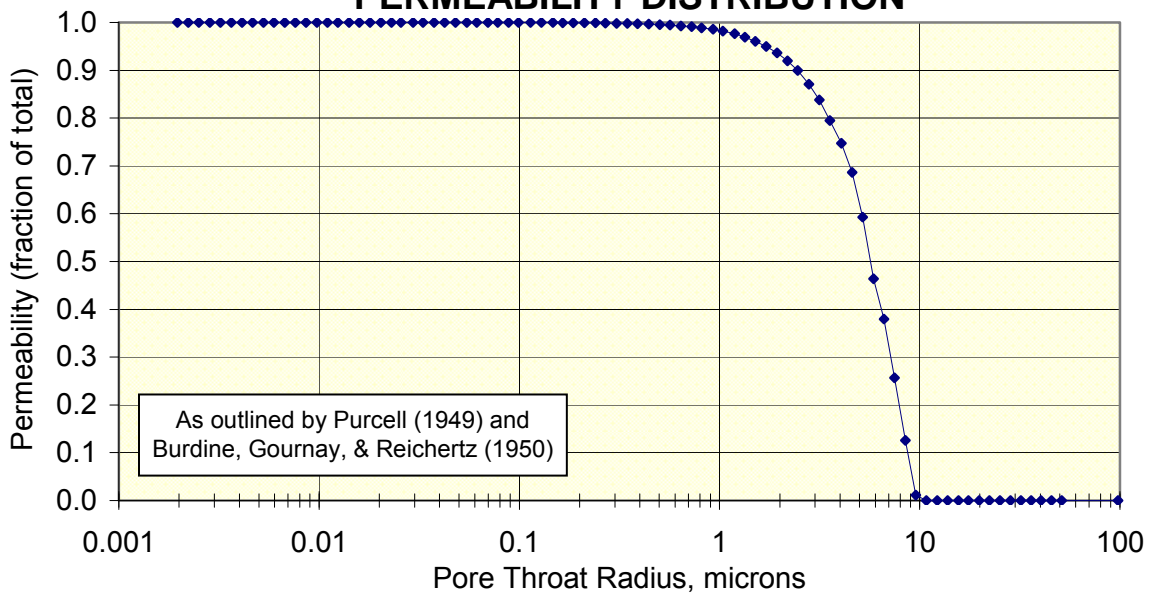
Sample:	20m	un-	Host Plug	
Depth, meters:	845.96	stressed	2100psi	na
Klinkenberg Permeability, md:		n/a	0.126	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		1.63	-	-
Total Porosity, fraction:		0.108	0.043	-
maximum Sb/Pc, fraction:		0.039		
R35, microns:		0.684		
R50 (median pore throat radius):		0.269		

J values calculated using the Swanson permeability

PORE THROAT RADIUS DISTRIBUTION



PERMEABILITY DISTRIBUTION



Company: Intera Engineering Ltd.
 Well: DGR-2
 Field: -
 Formation: -
 Location: -
 File: HOU-070528

Sample:	20m	un-	Host Plug	
Depth, meters:	845.96	stressed	2100psi	na
Klinkenberg Permeability, md:		n/a	0.126	-
Permeability to Air, md:		n/a	-	-
Swanson Permeability, md:		1.63	-	-
Total Porosity, fraction:		0.108	0.043	-
maximum Sb/Pc, fraction:		0.039		
R35, microns:		0.684		
R50 (median pore throat radius):		0.269		

J values calculated using the Swanson permeability

PORE THROAT SIZE HISTOGRAM

