



DRILL STEM TEST REPORT

Prepared For: **J V I Natural Resources**

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

30-8S-24W Graham KS

Holley #2-E

Start Date: 2003.03.22 @ 00:06:57

End Date: 2003.03.22 @ 05:07:27

Job Ticket #: 16194 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



J V I Natural Resources

ATTN: Jerry Green

30-8S-24W Graham KS

Job Ticket: 16194

DST#: 1

Test Start: 2003.03.22 @ 00:06:57

Formation: **Lans/KC B & C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:05:00

Time Test Ended: 05:07:27

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: 3820.00 ft (KB) To 3860.00 ft (KB) (TVD)

Total Depth: 3860.00 ft (KB) (TVD)

Hole Diameter: 7.88 inchesHole Condition: Good

Reference Elevations: 2440.00 ft (KB)

2432.00 ft (CF)

KB to GR/CF: 8.00 ft

Inside

Press@RunDepth: psig @ 3821.00 ft (KB)

Start Date: 2003.03.22 End Date: 2003.03.22

Start Time: 00:07:02 End Time: 00:07:27

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm:

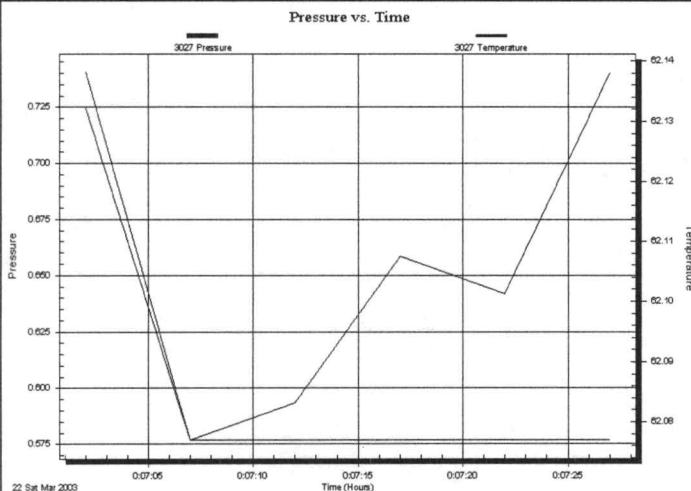
Time Off Btm:

TEST COMMENT: IF: Fair to strong off bttm in 25 mins

ISI: No return

FF; Weak to fair built to 7"

FSI; No return



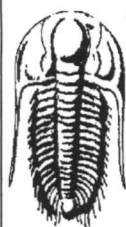
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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[illegible]

Length (ft)	Description	Volume (bbl)
530.00	Wtr	7.43

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

J V I Natural Resources

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

Holley #2-E

30-8S-24W Graham KS

Job Ticket: 16194

DST#: 1

Test Start: 2003.03.22 @ 00:06:57

Tool Information

Drill Pipe:	Length:	3816.00 ft	Diameter:	3.80 inches	Volume:	53.53 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	85000.00 lb
					Total Volume:	53.53 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		16.00 ft					String Weight: Initial	55000.00 lb
Depth to Top Packer:		3820.00 ft					Final	60000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		41.00 ft						
Tool Length:		61.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3805.00	
Hydraulic tool	5.00			3810.00	
Packer	5.00			3815.00	20.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Stubb	1.00			3821.00	
Recorder	0.00	3027	Inside	3821.00	
Perforations	2.00			3823.00	
Change Over Sub	1.00			3824.00	
Anchor	31.00			3855.00	
Change Over Sub	1.00			3856.00	
Recorder	0.00	13309	Outside	3856.00	
Bullnose	5.00			3861.00	41.00 Bottom Packers & Anchor
Total Tool Length:		61.00			



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

J V I Natural Resources

Holley #2-E

30 38 48th St.
Astoria NY 11103

30-8S-24W Graham KS

Job Ticket: 16194

DST#: 1

ATTN: Jerry Green

Test Start: 2003.03.22 @ 00:06:57

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

34000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
530.00	Wtr	7.435

Total Length: 530.00 ft

Total Volume: 7.435 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

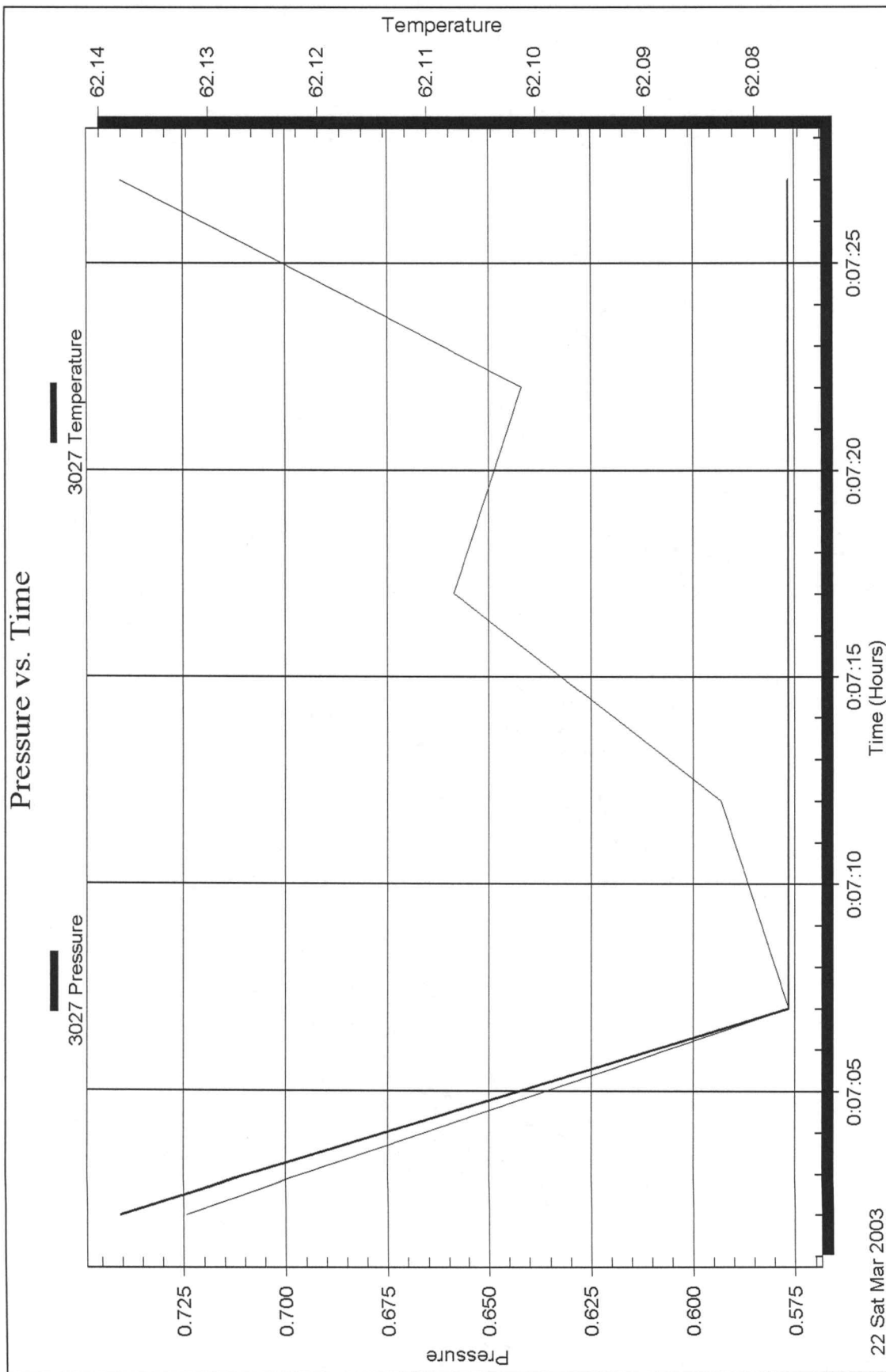
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.20 @ 75 deg = 34000 Chloides

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **J V I Natural Resources**

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

30-8S-24W Graham KS

Holley #2-E

Start Date: 2003.03.22 @ 15:13:34

End Date: 2003.03.22 @ 22:48:04

Job Ticket #: 16196 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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DRILL STEM TEST REPORT

J V I Natural Resources

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

Holley #2-E

30-8S-24W Graham KS

Job Ticket: 16196

DST#: 2

Test Start: 2003.03.22 @ 15:13:34

GENERAL INFORMATION:

Formation: **Lans/KC "E-F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:20:19

Time Test Ended: 22:48:04

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: **3860.00 ft (KB) To 3890.00 ft (KB) (TVD)**

Total Depth: 3890.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2440.00 ft (KB)

2432.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 3027

Inside

Press@RunDepth: 87.46 psig @ 3861.00 ft (KB)

Start Date: 2003.03.22

End Date: 2003.03.22

Start Time: 15:13:39

End Time: 22:48:03

Capacity: 7000.00 psig

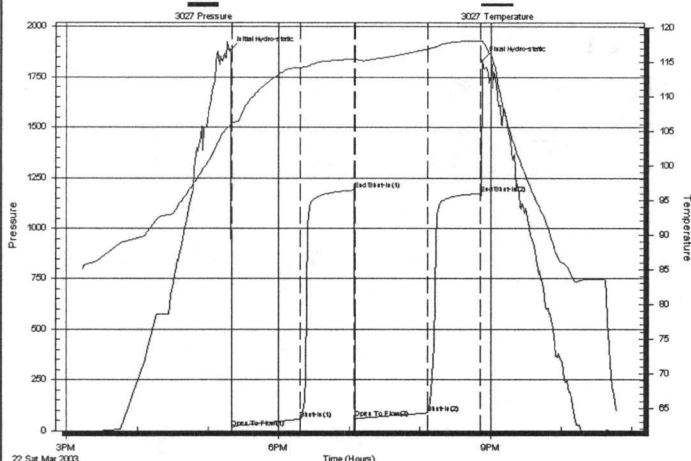
Last Calib.: 1899.12.30

Time On Btm: 2003.03.22 @ 17:18:19

Time Off Btm: 2003.03.22 @ 20:52:19

TEST COMMENT: IF; Weak building blow built to 4"
IS; No return
FF; Weak return in 5 mins built to 1/2"
FS; No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1884.38	105.72	Initial Hydro-static
2	15.86	106.11	Open To Flow (1)
61	56.46	114.21	Shut-In(1)
107	1189.60	115.42	End Shut-In(1)
107	59.54	115.45	Open To Flow (2)
168	87.46	116.90	Shut-In(2)
213	1173.56	118.08	End Shut-In(2)
214	1833.49	118.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
119.00	MW 80%w tr 20% mud	1.67
1.00	Free Oil	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

J V I Natural Resources

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

Holley #2-E

30-8S-24W Graham KS

Job Ticket: 16196

DST#: 2

Test Start: 2003.03.22 @ 15:13:34

Tool Information

Drill Pipe:	Length: 3847.00 ft	Diameter: 3.80 inches	Volume: 53.96 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume: 53.96 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3860.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3845.00	
Hydraulic tool	5.00			3850.00	
Packer	5.00			3855.00	20.00 Bottom Of Top Packer
Packer	5.00			3860.00	
Stubb	1.00			3861.00	
Recorder	0.00	3027	Inside	3861.00	
Perforations	24.00			3885.00	
Recorder	0.00	13309	Outside	3885.00	
Bullnose	5.00			3890.00	30.00 Bottom Packers & Anchor
Total Tool Length:	50.00				



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FLUID SUMMARY

J V I Natural Resources

Holley #2-E

30 38 48th St.
Astoria NY 11103

30-8S-24W Graham KS

Job Ticket: 16196

DST#: 2

ATTN: Jerry Green

Test Start: 2003.03.22 @ 15:13:34

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity: 25000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.95 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
119.00	MW 80%w tr 20%mud	1.669
1.00	Free Oil	0.014

Total Length: 120.00 ft

Total Volume: 1.683 bbl

Num Fluid Samples: 0

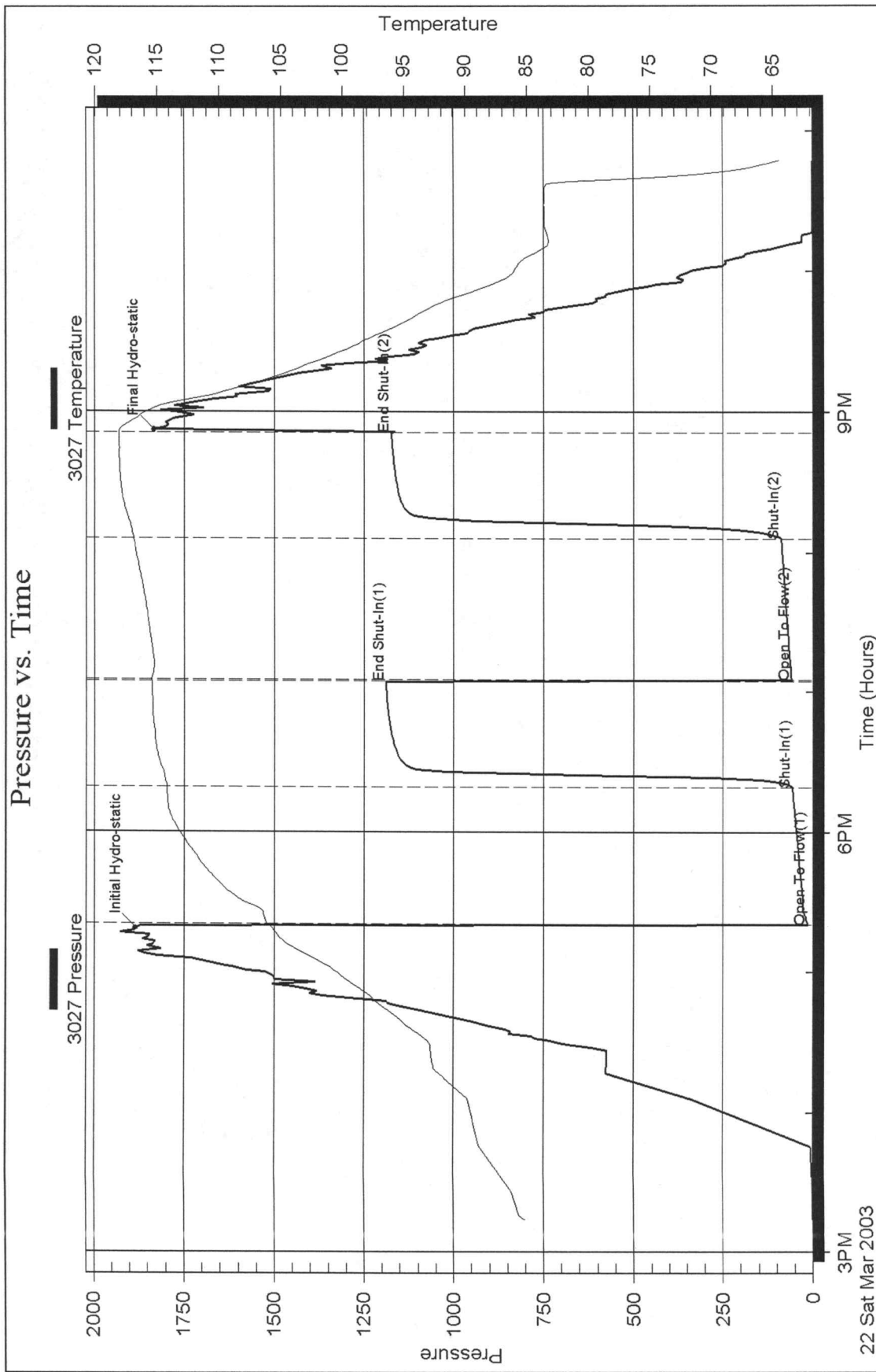
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .30 @ 65 deg = 25,000 Chlorides





DRILL STEM TEST REPORT

Prepared For: **J V I Natural Resources**

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

30-8S-24W Graham KS

Holley #2-E

Start Date: 2003.03.23 @ 06:42:03

End Date: 2003.03.23 @ 13:16:03

Job Ticket #: 16197 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



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DRILL STEM TEST REPORT

J V I Natural Resources

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

Holley #2-E

30-8S-24W Graham KS

Job Ticket: 16197

DST#: 3

Test Start: 2003.03.23 @ 06:42:03

GENERAL INFORMATION:

Formation: **Lans/KC "H"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:15:03

Time Test Ended: 13:16:03

Interval: **3910.00 ft (KB) To 3949.00 ft (KB) (TVD)**

Total Depth: 3949.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Reference Elevations: 2440.00 ft (KB)

2432.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 3027

Inside

Press@RunDepth: 187.07 psig @ 3911.00 ft (KB)

Start Date: 2003.03.23

End Date: 2003.03.23

Start Time: 06:42:08

End Time: 13:16:02

Capacity: 7000.00 psig

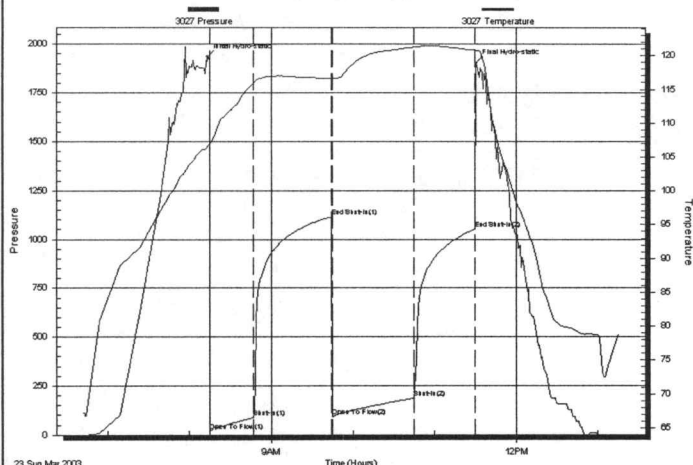
Last Calib.: 1899.12.30

Time On Btm: 2003.03.23 @ 08:13:03

Time Off Btm: 2003.03.23 @ 11:30:33

TEST COMMENT: IF; Fair to strong blow off btm in 20 mins
IS; No return
FF; Weak return slowly built to 4"
FS; Very weak surface blow died in 30 mins.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1934.61	106.36	Initial Hydro-static
2	19.81	107.04	Open To Flow (1)
35	88.70	116.02	Shut-In(1)
92	1115.18	116.62	End Shut-In(1)
92	93.37	116.63	Open To Flow (2)
152	187.07	121.27	Shut-In(2)
197	1050.95	120.83	End Shut-In(2)
198	1901.25	120.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Free Oil	0.01
120.00	Oil Specked MCW 60%w tr 40%mud	1.68
239.00	Wtr	3.35

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

J V I Natural Resources

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

Holley #2-E

30-8S-24W Graham KS

Job Ticket: 16197

DST#: 3

Test Start: 2003.03.23 @ 06:42:03

Tool Information

Drill Pipe:	Length:	3910.00 ft	Diameter:	3.80 inches	Volume:	54.85 bbl	Tool Weight:	2000.00 lb		
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb		
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	65000.00 lb		
						Total Volume:	54.85 bbl	Tool Chased	0.00 ft	
Drill Pipe Above KB:	20.00 ft								String Weight: Initial	55000.00 lb
Depth to Top Packer:	3910.00 ft								Final	62000.00 lb
Depth to Bottom Packer:	ft									
Interval between Packers:	39.00 ft									
Tool Length:	59.00 ft									
Number of Packers:	2		Diameter:	6.75 inches						
Tool Comments:										

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3895.00	
Hydraulic tool	5.00			3900.00	
Packer	5.00			3905.00	20.00 Bottom Of Top Packer
Packer	5.00			3910.00	
Stubb	1.00			3911.00	
Recorder	0.00	3027	Inside	3911.00	
Perforations	33.00			3944.00	
Recorder	0.00	13309	Outside	3944.00	
Bullnose	5.00			3949.00	39.00 Bottom Packers & Anchor
Total Tool Length:	59.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

J V I Natural Resources

Holley #2-E

30 38 48th St.
Astoria NY 11103

30-8S-24W Graham KS

Job Ticket: 16197

DST#: 3

ATTN: Jerry Green

Test Start: 2003.03.23 @ 06:42:03

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity: 57000 ppm

Viscosity: 43.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.95 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Free Oil	0.014
120.00	Oil Specked MCW 60%w tr 40%mud	1.683
239.00	Wtr	3.353

Total Length: 360.00 ft

Total Volume: 5.050 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

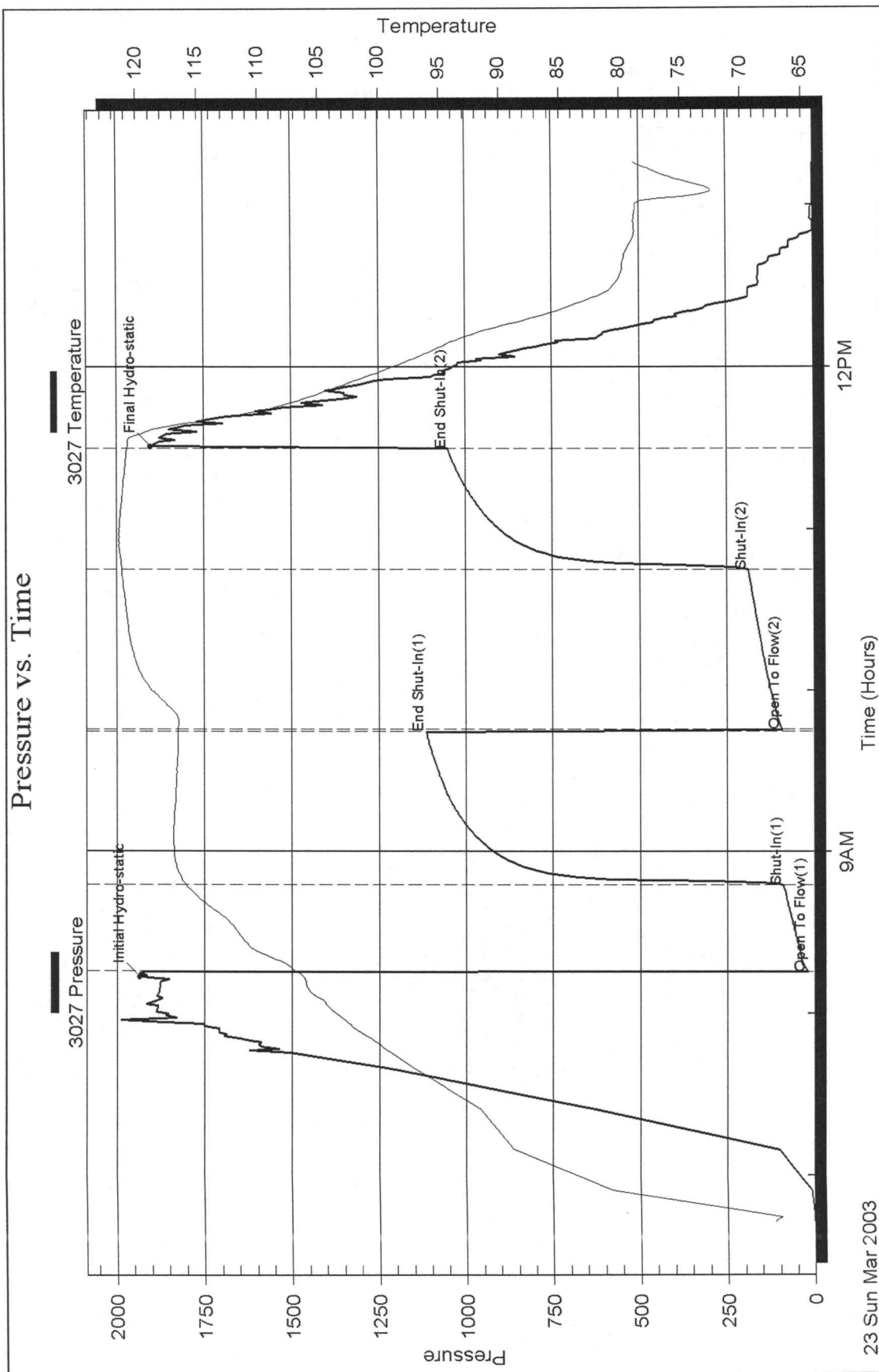
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .14 @ 60 deg = 57,000 Chlorides

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **J V I Natural Resources**

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

30-8S-24W Graham KS

Holley #2-E

Start Date: 2003.03.23 @ 20:55:34

End Date: 2003.03.24 @ 03:36:04

Job Ticket #: 16198

DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



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DRILL STEM TEST REPORT

J V I Natural Resources

30 38 48th St.
Astoria NY 11103

ATTN: Jerry Green

Holley #2-E

30-8S-24W Graham KS

Job Ticket: 16198

DST#: 4

Test Start: 2003.03.23 @ 20:55:34

GENERAL INFORMATION:

Formation: **Lans/KC "I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:30:04

Time Test Ended: 03:36:04

Test Type: Conventional Bottom Hole

Tester: Rod Steinbrink

Unit No: 22

Interval: **3947.00 ft (KB) To 3968.00 ft (KB) (TVD)**

Total Depth: 3968.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2440.00 ft (KB)

2432.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 3027

Inside

Press@RunDepth: 48.75 psig @ 3948.00 ft (KB)

Start Date: 2003.03.23

End Date:

2003.03.24

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Start Time: 20:55:39

End Time:

03:36:03

Time On Btm: 2003.03.23 @ 22:27:19

Time Off Btm: 2003.03.24 @ 01:30:49

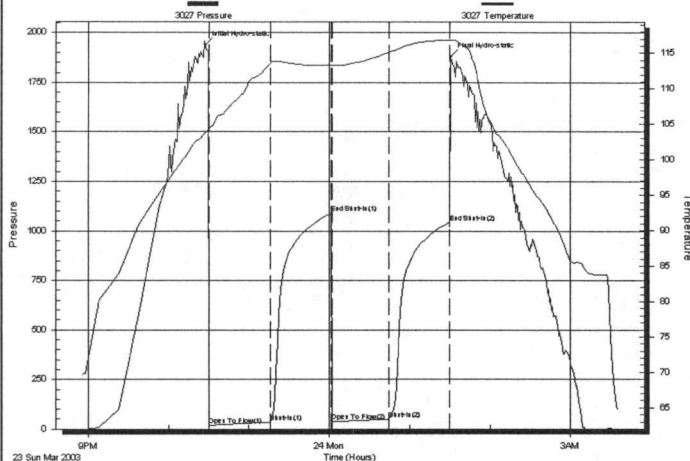
TEST COMMENT: IF; Weak building blow to 2"

IS; No return

FF; Weak surface blow steady thru

FS; No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1939.34	103.81	Initial Hydro-static
3	16.34	104.30	Open To Flow (1)
49	34.63	113.61	Shut-In(1)
94	1088.86	113.34	End Shut-In(1)
95	35.83	113.37	Open To Flow (2)
138	48.75	115.15	Shut-In(2)
183	1043.92	116.84	End Shut-In(2)
184	1879.62	116.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Free Oil	0.03
63.00	Oil Specked MCW 70%w tr 30%mud	0.88

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

J V I Natural Resources

Holley #2-E

30 38 48th St.
Astoria NY 11103

30-8S-24W Graham KS

Job Ticket: 16198

DST#: 4

ATTN: Jerry Green

Test Start: 2003.03.23 @ 20:55:34

Tool Information

Drill Pipe:	Length: 3942.00 ft	Diameter: 3.80 inches	Volume: 55.30 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 55.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3947.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	41.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3932.00	
Hydraulic tool	5.00			3937.00	
Packer	5.00			3942.00	20.00 Bottom Of Top Packer
Packer	5.00			3947.00	
Stubb	1.00			3948.00	
Recorder	0.00	3027	Inside	3948.00	
Perforations	15.00			3963.00	
Recorder	0.00	13309	Outside	3963.00	
Bullnose	5.00			3968.00	21.00 Bottom Packers & Anchor
Total Tool Length:	41.00				



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Holley #2-E

30 38 48th St.
Astoria NY 11103

30-8S-24W Graham KS

Job Ticket: 16198

DST#: 4

ATTN: Jerry Green

Test Start: 2003.03.23 @ 20:55:34

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

28000 ppm

Viscosity: 43.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.95 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Free Oil	0.028
63.00	Oil Specked MCW 70%w tr 30%mud	0.884

Total Length: 65.00 ft Total Volume: 0.912 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .32 @ 55 deg = 28000 Chlorides

Pressure vs. Time

