

Schlumberger**TESTING SERVICES REPORT****Report Number**

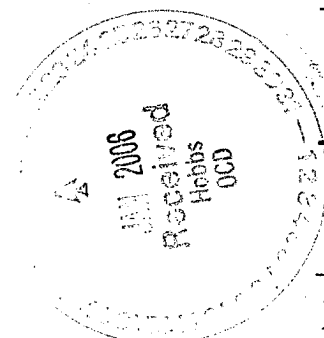
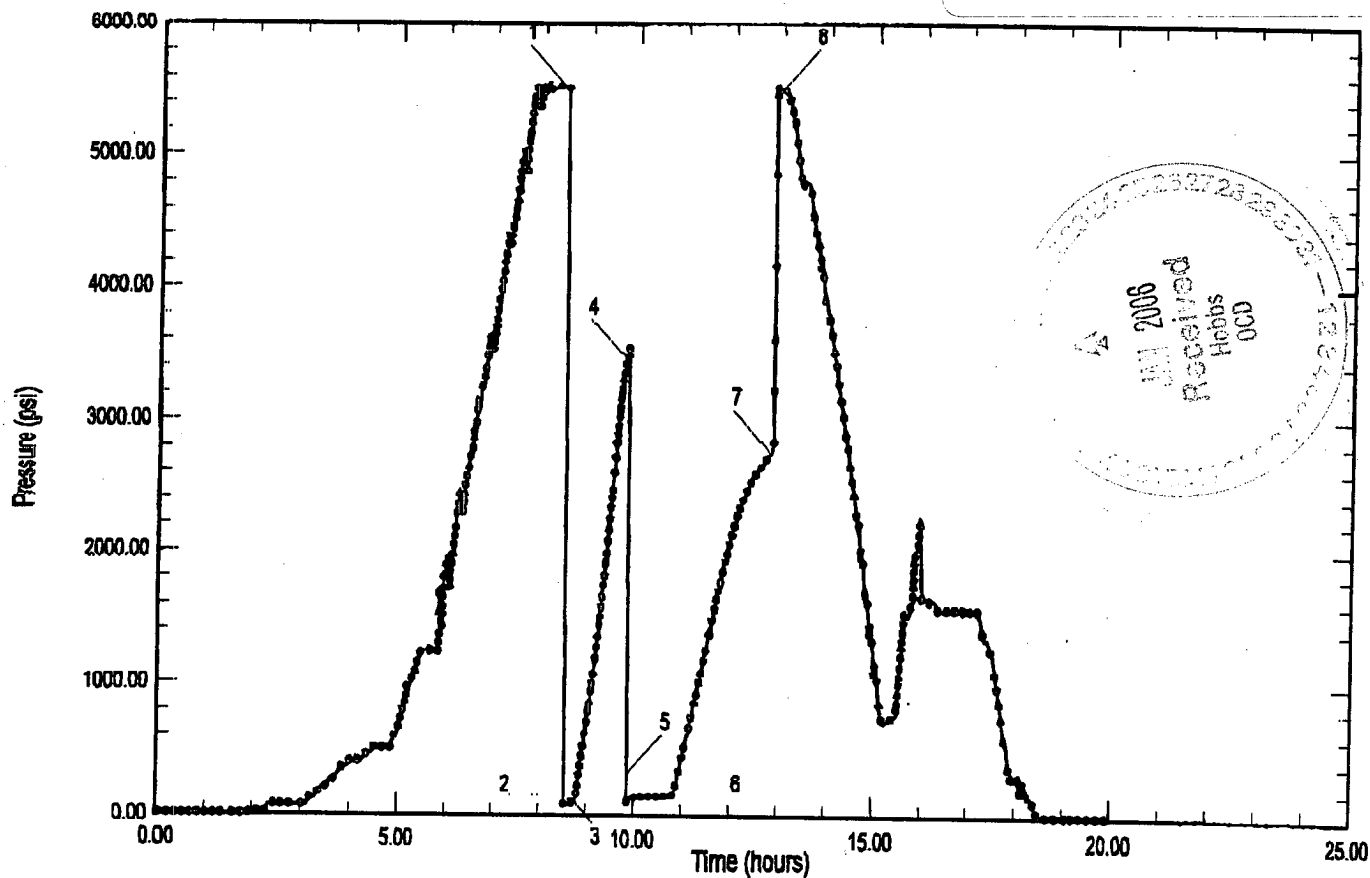
11001151

Test Date

05-Sep-05

Report Date

05-Sep-05

COG Operating**Openhole DST****Valhalla 4 Fed Com - 1****Lusk Morrow, North****Rig : Patterson 56****Lea - New Mexico**D-4-19s-32e, 660/N & 660/W
API # 30-025-37210**Report Contents**

Job Summary, Comments Page, Sequence of Events, Label Point Information, Plots, Summary Data Printout, Distribution

Schlumberger Testing Services

Schlumberger Private

Schlumberger**Job Summary
COG Operating
Openhole DST****Valhalla 4 Fed Com 1
Lusk Morrow, North****Service Order Number : 11001151
Test Date : 05-Sep-05****Company Rep** Rick Graham**SWS Rep** Kirk Beasley**Test Information****Test Number** One**Formation** Wolfcamp
Interval (MD ft) 10,745 - 10,825**Well Location****Well**..... Valhalla 4 Fed Com 1
Field..... Lusk Morrow, North**Rlg**..... Patterson 58
State Lea - New Mexico**Wellbore Configuration****Total Depth (MD/TVD ft)** 10825
Casing / Liner ID (in) 8.625
Top of Liner (md- ft)**Cushion**..... None
Wellbore Radius (ft) 7.875
Mud Weight (lb/gal) 9.8
Mud Type Brine-Starch
Chlorides/Res..... 168000/.041 @ 75**Test String Configuration****Pipe Length (ft) / ID (in)** 9935
Pipe Length (ft) / ID (in)
Drill Collar Length (ft) / ID (in) 774
Packer Depths (ft MD) 10739 / 10745**Gauge Depth (MD)** 10755
Gauge Depth (TVD) 10755
Test Valve Type Multiflow Evaluator
Test Valve Depth (ft) (MD) 10721**Key Information****Initial Hydrostatic Pressure** 5508
Init. Hyd Grad & Density 0.512 psi/ft / 9.85 lb/gal
Final Hydrostatic Pressure 5490
Final Hyd Grad & Density 0.510 psi/ft / 9.82 lb/gal
Bottom Hole Temp..... 149**Final Shut In Pressure** 2745
Final Shut In Grad & Density 0.255 psi/ft / 4.91 lb/gal
Final Flowing Pressure 158
Final Flow Rate ()
Productivity Index ()

An openhole formation evaluation test was performed on the Wolfcamp formation. This well performance test was an on-bottom conventional test that isolated 11' of net pay between the lower packer which was set @ 10,745' and TD @ 10,825'. There were no drillpipe leaks, no plugging, the annulus remained constant, and the interval was completely isolated during both the flows and the shutins. The test was mechanically correct and conclusive. Based on the results, the test times were well suited for the reservoir's response. The bubble hose was used as the surface choke during both flow periods. The maximum surface pressure was 11 PSI. Gas came to surface 25 minutes after tool was closed for the final shutin. The test string was pulled and the recovery was reversed into a tank. The zone produced .5 barrels of very slightly oil and heavy gas cut rat hole mud. Please direct any questions concerning this test to the Hobbs Testing District @ 505/393-4107. Thank you for choosing Schlumberger.

Schlumberger Crew

Kirk Beasley

Schlumberger**Sample Chamber Data
COG Operating
Openhole DST**Valhalla 4 Fed Com 1
Lusk Morrow, North11001151
05-Sep-05

Sample Chamber Capacity (cc) 2500

Measured Fluid Recovery

		Temp (F)	Press (psia)
Oil (cc)	API Gravity	68	125.0
Water (cc)	Res. (ohms) ...	68	125.0
Mud (cc) 25	Res. (ohms)065 @ 68		
Total Liquid Recovery (cc) 25			
Gas (ft3) 0.9		68	125.0

Corrected Sample Chamber Gas Recovery

Bottomhole Temperature (F) 149	Assumed SC Gas Gravity	0.650
Final Flowing Pressure (psia) 158	Est Z Value @ Pwf and Tres	0.983
Corrected Gas Recovery (scf) 0.806		

Sample Chamber Fluid Ratios

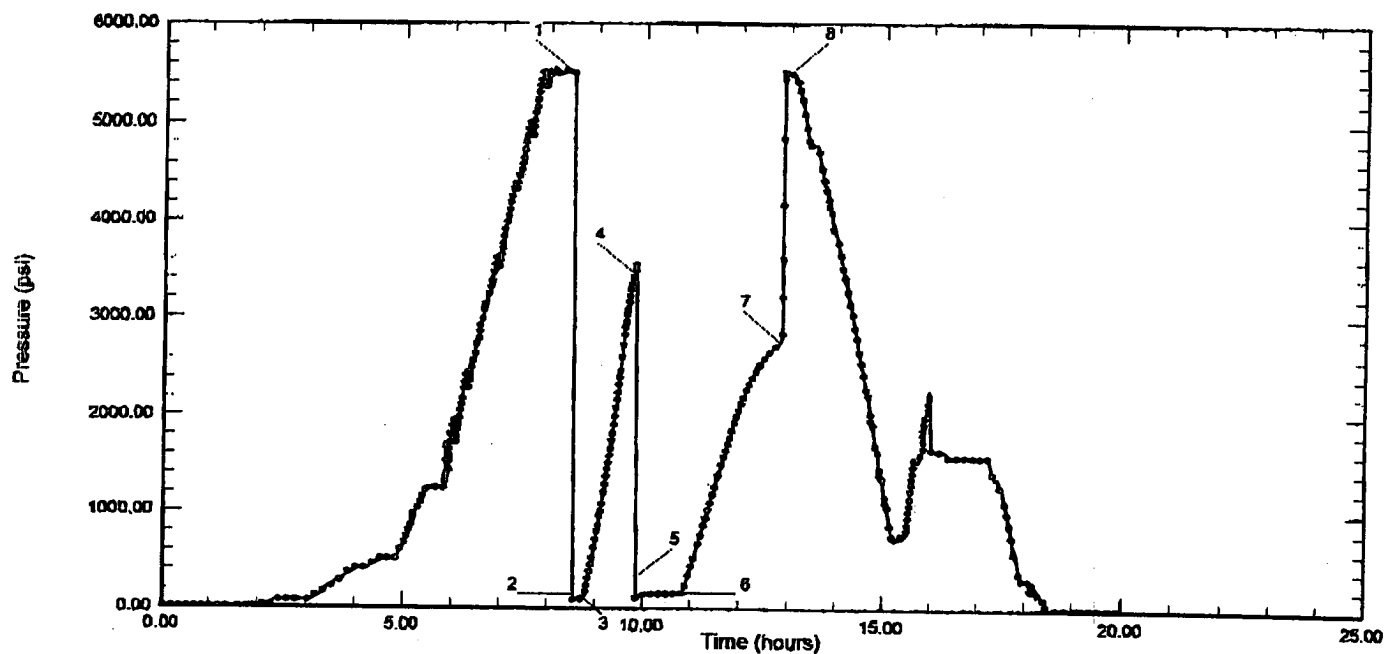
Sample Chamber Water Cut

GOR Using Corrected Gas Recovery

GLR Using Corrected Gas Recovery

Pipe Recovery

Description	Recovery feet	Pipe ID (in)	Recovery bbl	Oil Density API	RES ohm	CHL ppm
Greenish Gas Cut Mud	102	2.25	0.50		.040 @86	120k

Schlumberger**Label Point Data
COG Operating
Openhole DST****Valhalla 4 Fed Com 1
Lusk Morrow, North****11001151
05-Sep-05**

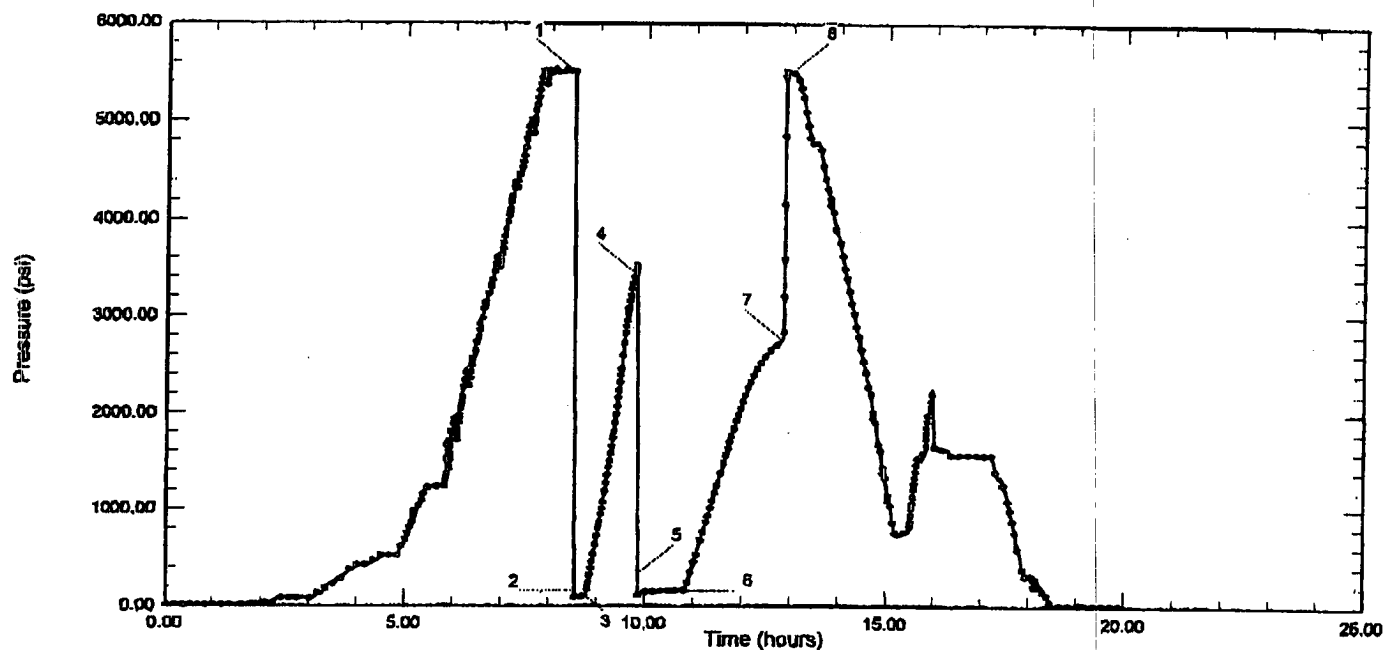
Label Point / Comments	Date (dd-mm-yy)	Time (hh:mm:ss)	Gauge ET (hours)	BHP (psi)	Rate (0)
Label Point Summary					
1) Hydrostatic Pressure	05-Sep-05	9:32:21	8.439	5507.76	0
2) Start Flow	05-Sep-05	9:37:24	8.523	142.45	1
3) End Flow & Start Shut-in	05-Sep-05	9:52:21	8.773	99.33	0
4) End Shut-in	05-Sep-05	10:52:39	9.778	3435.69	0
5) Start Flow	05-Sep-05	10:55:24	9.823	303.11	1
6) End Flow & Start Shut-in	05-Sep-05	11:55:45	10.829	156.02	0
7) End Shut-in	05-Sep-05	13:54:54	12.815	2745.04	0
8) Hydrostatic Pressure	05-Sep-05	14:02:30	12.942	5489.85	0

Schlumberger**Sequence of Events
COG Operating
Openhole DST****Valhalla 4 Fed Com 1****Lusk Morrow, North****11001151****05-Sep-05**

Date (dd-mm-yy)	Time (hh:mm:ss)	Comments
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5-Sep-05

9:00	Safety Meeting
9:34	Set Packer Open To 1/8" Bubble Hose Only
9:37	Start Initial Flow
9:38	8" In The Bubble Bucket Bottom Of The Bucket In 1.5 Minutes
9:39	17 Ounces
9:40	24 Ounces
9:41	1.25#
9:42	1.5#
9:47	2.4#
9:52	End Flow & Start Shut-in With 3 PSI
10:53	End Shut-in With 2.4# Of Residual Surface Pressure
10:55	Start Final Flow
10:56	7.5#
11:00	8#
11:10	8.8#
11:25	9.8#
11:40	10.2 PSI
11:56	End Flow & Start Shut-in With 11#
12:20	Gas To Surface
13:56	End Shut-in
13:58	Pulled Loose

Schlumberger**Label Point Data
COG Operating
Openhole DST****Valhalla 4 Fed Com 1
Lusk Morrow, North****11001151
05-Sep-05**

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7) End Shut-in	05-Sep-05	13:54:54	12.815	2745.04	0
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Schlumberger	Gauge Data COG Operating Openhole DST	11001151 September 5, 2005
Valhalla 4 Fed Com 1 Lusk Morrow, North	Gauge Serial # SLSR-704	

Date (dd-mm-yy)	Time (hh:mm:ss)	Elapsed Time (hrs)	BHP (psia)	BHT (Deg F)	Comments
Initial Flow					
05-Sep-05	9:37:24	8.52333	142.452	142.99	
05-Sep-05	9:42:39	8.61083	89.509	143.38	
05-Sep-05	9:47:48	8.69667	94.999	143.60	
Initial Shut-in					
05-Sep-05	9:52:21	8.77250	99.327	143.82	
05-Sep-05	9:52:24	8.77333	99.369	143.82	
05-Sep-05	10:04:00	8.96867	634.757	144.68	
05-Sep-05	10:16:30	9.17500	1234.574	146.71	
05-Sep-05	10:28:09	9.36917	1897.364	147.61	
05-Sep-05	10:40:12	9.57000	2772.962	148.37	
Second Flow					
05-Sep-05	10:55:24	9.82333	303.105	148.73	
05-Sep-05	11:07:30	10.02500	138.575	144.88	
05-Sep-05	11:19:45	10.22917	143.785	144.23	
05-Sep-05	11:32:06	10.43500	148.319	144.63	
05-Sep-05	11:44:12	10.63667	152.186	145.15	
Second Shut-in					
05-Sep-05	11:55:45	10.82917	156.023	145.45	
05-Sep-05	12:07:57	11.03250	477.941	146.14	
05-Sep-05	12:19:15	11.22083	793.277	146.61	
05-Sep-05	12:29:57	11.39917	1096.290	147.02	
05-Sep-05	12:41:27	11.59083	1427.382	147.27	
05-Sep-05	12:53:03	11.78417	1759.625	147.45	
05-Sep-05	13:05:00	11.98333	2074.584	147.63	
05-Sep-05	13:17:18	12.18833	2333.209	147.78	

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Openhole DST**Valhalla 4 Fed Com 1
Lusk Morrow, North11001151
05-Sep-05

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Gas (ft3) 0.9		68	125.0

Corrected Sample Chamber Gas Recovery

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Final Flowing Pressure (psia) 156	Est Z Value @ Pwf and Tres	0.983
Corrected Gas Recovery (scf) 0.806		

Sample Chamber Fluid Ratios

Sample Chamber Water Cut	
GOR Using Corrected Gas Recovery	
GLR Using Corrected Gas Recovery	

Pipe Recovery

Description	Recovery feet	Pipe ID (in)	Recovery bbl	Oil Density API	RES ohm	CHL ppm
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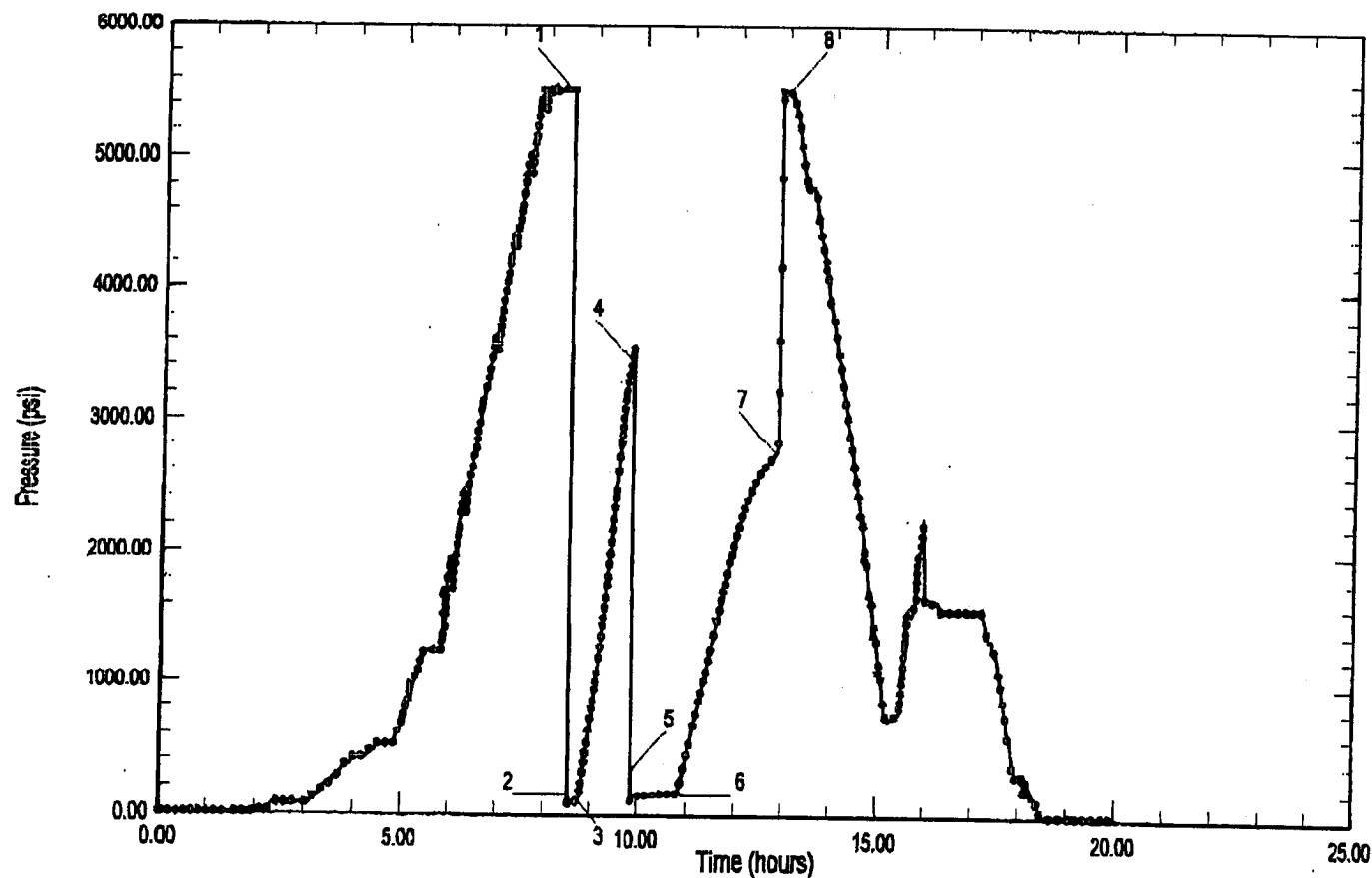
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Openhole DST****Valhalla 4 Fed Com 1
Lusk Morrow, North**

Service Order Number : 11001151

Test Date : 05-Sep-05

Company Rep Rick Graham

SWS Rep Kirk Beasley

Test Information

Test Number One

Formation Wolfcamp
Interval (MD ft) 10,745 - 10,825**Well Location**Well Valhalla 4 Fed Com 1
Field Lusk Morrow, NorthRig Patterson 56
State Lea - New Mexico**Wellbore Configuration**Total Depth (MD/TVD ft) 10825
Casing / Liner ID (in) 8.625
Top of Liner (md- ft)Cushion None
Wellbore Radius (ft) 7.875
Mud Weight (lb/gal) 9.8
Mud Type Brine-Starch
Chlorides/Res 168000/041 @ 75**Test String Configuration**Pipe Length (ft) / ID (in) 9935
Pipe Length (ft) / ID (in)
Drill Collar Length (ft) / ID (in) 774
Packer Depths (ft MD) 10739 / 10745Gauge Depth (MD) 10756
Gauge Depth (TVD) 10755
Test Valve Type Multiflow Evaluator
Test Valve Depth (ft) (MD) 10721**Key Information**Initial Hydrostatic Pressure 5508
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