



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1231226
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1231226

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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810 E 7TH
 PO Box 92
 EUREKA, KS 67045
 (620) 583-5561



Cement or Acid Field Report
 Ticket No. **1798**
 Foreman Kevin McCoy
 Camp EUREKA

Date	Cust ID	Lease & Well Number	Section	Township	Range	County	State	
10-7-14	1024	HARBIN #3	7	16S	1W	SALINE	KS	
Customer	Mailing Address	City	State	Zip Code	Unit #	Driver	Unit #	Driver
BOP West LLC	P.O. Box 129	Wooster	OH	44691	104	ALAN M		
					113	SCOTT W		

Safety Meeting
 KM
 AM
 SW

Job Type <u>SURFACE</u>	Hole Depth <u>279' KB</u>	Slurry Vol. <u>33 BBL</u>	Tubing _____
Casing Depth <u>211' G.L.</u>	Hole Size <u>12 1/4"</u>	Slurry Wt. <u>14.8*</u>	Drill Pipe _____
Casing Size & Wt. <u>8 5/8" 23*</u>	Cement Left in Casing <u>15'</u>	Water Gal/SK <u>6.5</u>	Other _____
Displacement <u>13.2 BBL</u>	Displacement PSI _____	Bump Plug to _____	BPM _____

Remarks: Safety Meeting: Rig up to 8 5/8 casing. Break circulation w/ 5 BBL Fresh water. Mixed 135 SKS CLASS "A" Cement w/ 3% CaCL2, 2% Gel, 1/4" Flo-Seal /SK @ 14.8*/GAL = 33 BBL Slurry. Displace w/ 13.2 BBL Fresh water. Shut casing in. Good Cement Returns to SURFACE = 8 BBL Slurry to Pit. Job Complete. Rig down

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C 101	1	Pump Charge	840.00	840.00
C 107	90	Mileage	3.95	355.50
C 200	135 SKS	CLASS "A" Cement	15.00	2025.00
C 205	380 *	CaCL2 3%	.60	228.00
C 206	250 *	Gel 2%	.20	50.00
C 209	34 *	Flo-Seal 1/4" /SK	2.25	76.50
C 108 B	6.34 TONS	Ton Mileage 90 miles	1.35	770.31
		<u>THANK YOU</u>		
			Sub TOTAL	4345.31
		7.15%	Sales Tax	170.13
			Total	4515.44

Authorization Witnessed By Duke Coulter Title Toolpusher

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

810 E 7TH
 PO Box 92
 EUREKA, KS 67045
 (620) 583-5561



Cement or Acid Field Report
 Ticket No. **1802**
 Foreman Kevin McCoy
 Camp EUREKA

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
10-11-14	1024	HARBIN #3	7	16S	1W	SALINE	KS
Customer BOP West LLC			Safety Meeting KM AM JS	Unit # 104 112	Driver ALAN M. John S.	Unit #	Driver
Mailing Address P.O. Box 129			City Wooster		State OH	Zip Code 44691	

Job Type Longstring Hole Depth 2765' KB Slurry Vol. 33 BBL Tubing _____
 Casing Depth 2758 KB Hole Size 7 7/8 Slurry Wt. 13.7 Drill Pipe _____
 Casing Size & Wt. 5 1/2" - 14# Cement Left in Casing 10.10' Water Gal/SK 9.0 Other _____
 Displacement 68.5 BBL Displacement PSI: 500 Bump Plug to 1000 PSI BPM _____

Remarks: Safety Meeting: Rig up to 5 1/2 casing. BREAK Circulation w/ 5 BBL Fresh water. Pump 10 BBL Metasilicate Pre Flush, 5 BBL water Spacer. Mixed 100 SKS THICK Set Cement w/ 5* Kol-Seal /SK @ 13.7*/gal, yield 1.85 = 33 BBL Slurry. Wash out Pump & Lines. Shut down. Release Latch down Plug. Displace Plug to Seat w/ 68.5 BBL Fresh water. Final Pumping Pressure 500 PSI. Bump Plug to 1000 PSI. Wait 2 mins. Release Pressure. Float & Plug Held. Good Circulation @ ALL times while Cementing. Job Complete. Rig down.

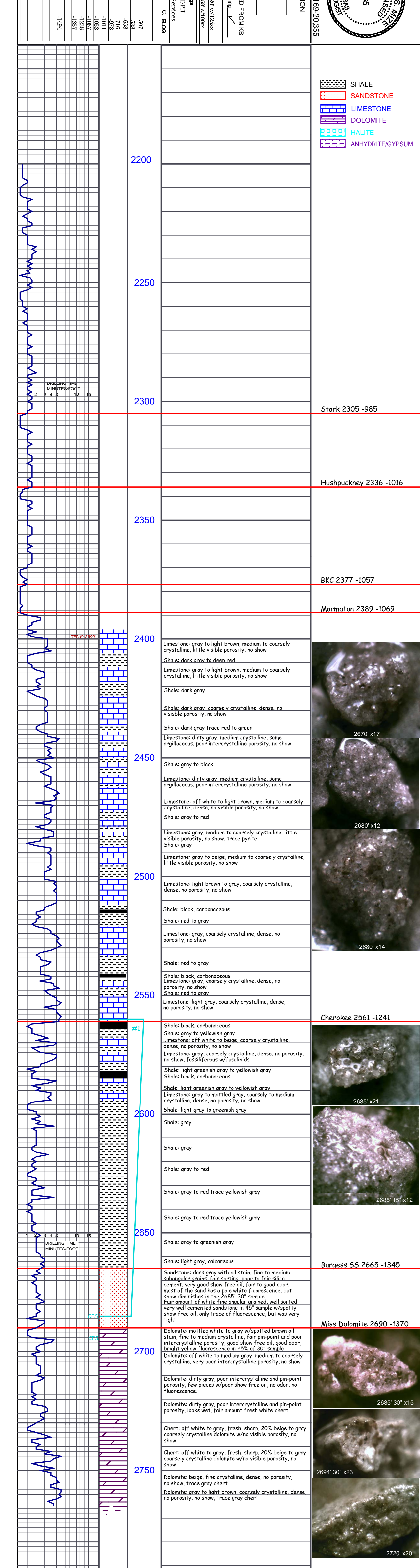
Code	Qty or Units	Description of Product or Services	Unit Price	Total
C 102	1	Pump Charge	1050.00	1050.00
C 107	90	Mileage	3.95	355.50
C 201	100 SKS	THICK Set Cement	19.50	1950.00
C 207	500 *	Kol-Seal 5*/SK	.45 *	225.00
C 216	100 *	Metasilicate Pre Flush	2.00 *	200.00
C 108 B	5.5 Tons	Ton Mileage 90 miles	1.35	668.20
C 421	1	5 1/2 Latch down Plug	230.00	230.00
C 691	1	5 1/2 Guide	167.00	167.00
C 703	1	5 1/2 AFU INSERT Flapper Valve	145.00	145.00
C 504	4	5 1/2 x 7 7/8 Centralizers	48.00	192.00
<u>THANK You</u>			Sub TOTAL	5182.70
<u>A</u>			Sales Tax 7.15%	222.29
Authorization <u>Gay R Reed</u> Title <u>X</u>			Total	5404.99

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

COMPANY **BOP West, LLC** ELEVATION _____
 LEASE **Harbin #3** K.B. **1320**
 FIELD **Hunter North** D.F. _____
 LOCATION **2,160 FNL & 330 FEL** G.L. **1311**
 SEC **7** TWP **16S** RGE **1W**
 COUNTY **Saline** STATE **Kansas**
 CONTRACTOR **C&G Drilling, Rig #2** Surface **8.5/8" @ 230' w/125sk**
 SPUD **10-7-14** COMP **10-12-14** Production **5.1/2" @ 2758' w/100sk**
 SAMPLES SAVED FROM **2400' TO RTD** Electric Logs _____
 Tuckert Energy Services

FORMATION	SAMPLE	E LOG	DATUM	A. ELOG	B. ELOG	C. ELOG
Headliner				-514	-510	-507
Donnas				-544	-542	-538
Brown				-664	-662	-658
Leaning				-727	-725	-716
Shark				-886	-881	-878
Hushpuckney	2305	2307	-897	-1017	-1015	-1011
BKC	2377	2330	-1060	-1056	-1053	
Marmaton	2389	2393	-1073	-1070	-1067	
Cherokee	2561	2564	-1298	-1299	-1298	
Mississippian	2690	2692	-1332	-1328	-1337	
Mississippian	2690	2692	-1332	-1328	-1337	
RTD	2765	2688	-1481	-1481	-1484	

REFERENCE WELLS
 A. 1200 FNL & 330 FEL 7-16S-1W, BOP West, Harbin #1
 B. 565 FNL & 330 FEL 7-16S-1W, BOP West, Harbin #2
 C. 58E NW 36-8-16S-1W, Mardel DRG, Swisher #4



BOP West, LLC
Harbin #3
2,160 FNL & 330' FEL 7-16S-1W
Saline County, Kansas

1320 KB

DIAMOND TESTING

Comments:

Formation Test No. 1 Interval Tested from 2560 ft. to 2685 ft. Total Depth 2685 ft.
 Packer Depth 2555 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 2560 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Blow: 1st Open: 3/4" Blow (BOB in 22 mins) NOBB
 2nd Open: 1/4" Blow (BOB in 33 mins) NOBB

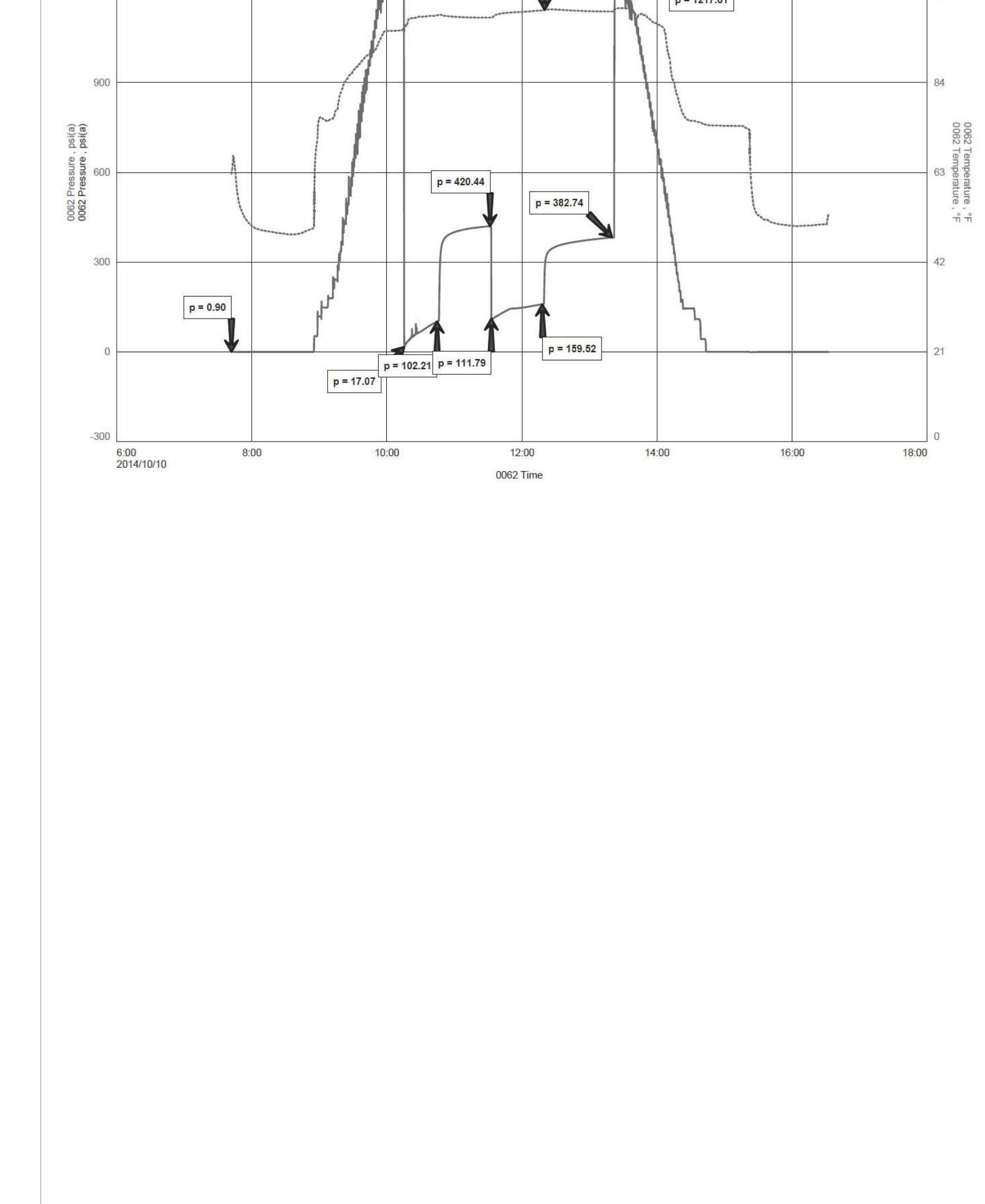
Recovered _____ 15 ft. of GIP
 Recovered _____ 15 ft. of O 100% O 36 Gravity @ 60 Deg
 Recovered _____ 332 ft. of G w/ HOM 6 % G 37% O 57% M
 Recovered _____ 347 ft. of Total Fluid
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks: Tool Sample: 10 % G 30% O 60% M

Price Job _____
 Other Charges _____
 Insurance _____
 Total _____

Time Set Packer(s)	9:36 AM	A.M.	P.M.	Time Started Off Bottom	12:36 PM	A.M.	P.M.	Maximum Temperature	101
Initial Hydrostatic Pressure.....				(A)				1219 P.S.I.	
Initial Flow Period.....				Minutes 30	(B)			17 P.S.I. to (C)	102 P.S.I.
Initial Closed In Period.....				Minutes 45	(D)			420 P.S.I.	
Final Flow Period.....				Minutes 45	(E)			112 P.S.I. to (F)	160 P.S.I.
Final Closed In Period.....				Minutes 60	(G)			383 P.S.I.	
Final Hydrostatic Pressure.....				(H)				1218 P.S.I.	

BOP West LLC Harbin 3
 Dst 1 Burgiff Sand (2560-2685) Formation: Dst 1 Burgiff Sand (2560-2685)
 Start Test Date: 2014/10/10 Pool: Infield
 Final Test Date: 2014/10/10 Job Number: RR097





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: Harbin 3 Dst 1

TIME ON: 07:42
TIME OFF: 15:53

Company BOP West LLC Lease & Well No. Harbin 3
Contractor C & G Drilling Charge to BOP West LLC
Elevation 1311 Sur Formation Burgff Sand Effective Pay _____ Ft. Ticket No. RR097
Date Oct/10/2014 Sec. 7 Twp. 16 S Range 1 W County Saline State KANSAS
Test Approved By Frank Mize Diamond Representative RICKY RAY

Formation Test No. 1 Interval Tested from 2560 ft. to 2685 ft. Total Depth 2685 ft.
Packer Depth 2555 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 2560 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 2542 ft. Recorder Number 0062 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 2659 ft. Recorder Number 5954 Cap. 5000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEM Viscosity 39 Drill Collar Length 300 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 10.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 1150 P.P.M. Drill Pipe Length 2227 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 8 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NA Reversed Out NA Anchor Length 125A (32P) ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 xh in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 3/4" Blow (BOB in 22 mins) NOBB
2nd Open: 1/4" Blow (BOB in 33 mins) NOBB

Recovered 15 ft. of GIP
Recovered 15 ft. of O 100% O 36 Gravity @ 60 Deg
Recovered 332 ft. of G w/ HOM 6 % G 37% O 57% M
Recovered 347 ft. of Total Fluid

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: Tool Sample: <u>10 % G 30% O 60% M</u>	Insurance
	Total

Time Set Packer(s) 9:36 AM A.M. P.M. Time Started Off Bottom 12:36 PM A.M. P.M. Maximum Temperature 101

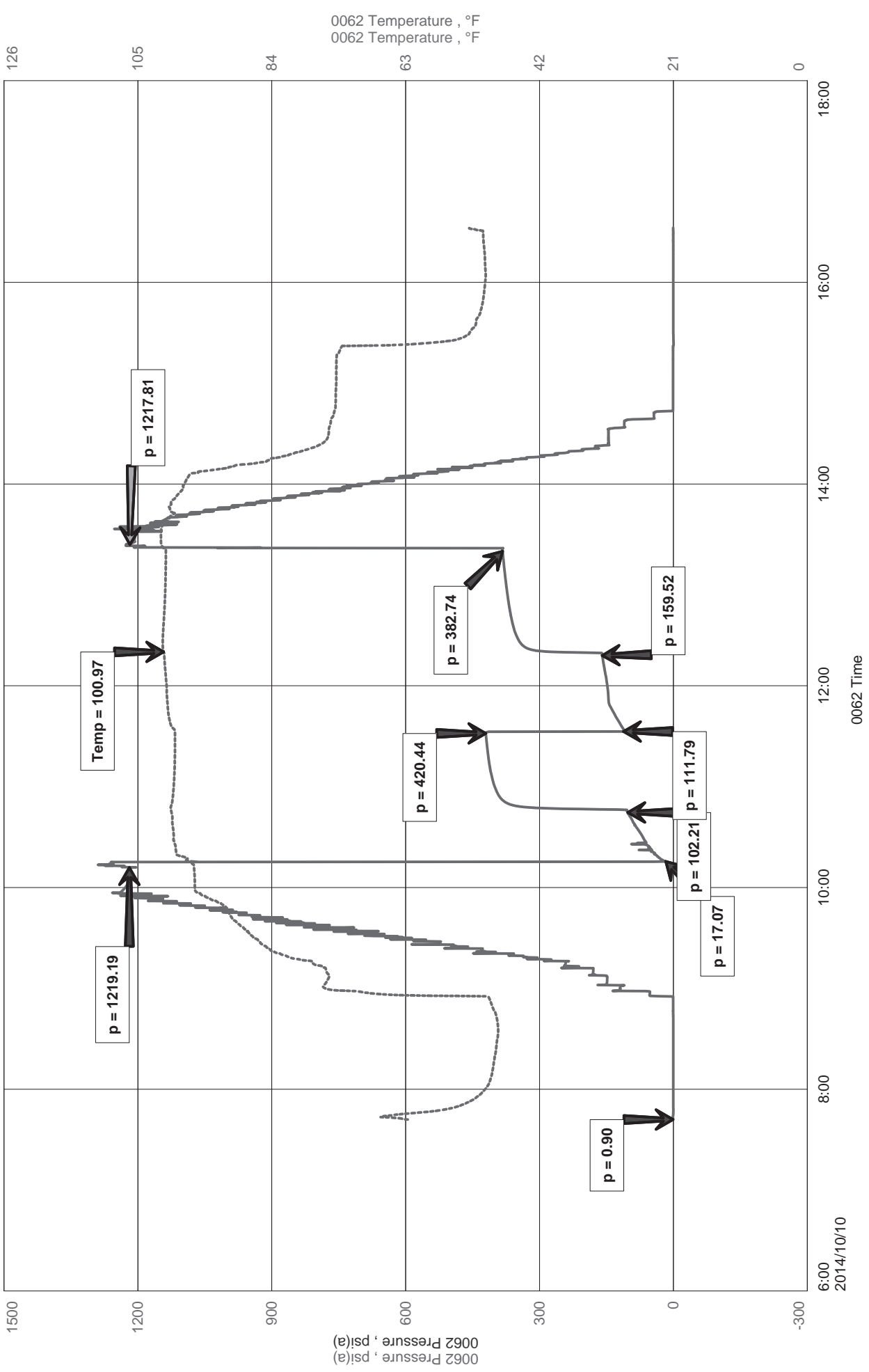
Initial Hydrostatic Pressure..... (A) 1219 P.S.I.
Initial Flow Period..... Minutes 30 (B) 17 P.S.I. to (C) 102 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 420 P.S.I.
Final Flow Period..... Minutes 45 (E) 112 P.S.I. to (F) 160 P.S.I.
Final Closed In Period..... Minutes 60 (G) 383 P.S.I.
Final Hydrostatic Pressure..... (H) 1218 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

BOP West LLC
Dst 1 Burgff Sand (2560-2685)
Start Test Date: 2014/10/10
Final Test Date: 2014/10/10

Harbin 3
Formation: Dst 1 Burgff Sand (2560-2685)
Pool: Infield
Job Number: RR097

Harbin 3





Diamond Testing LLC

P.O. Box 157

Hoisington KS 67544

Ricky Ray - Tester

(620) 617-7261

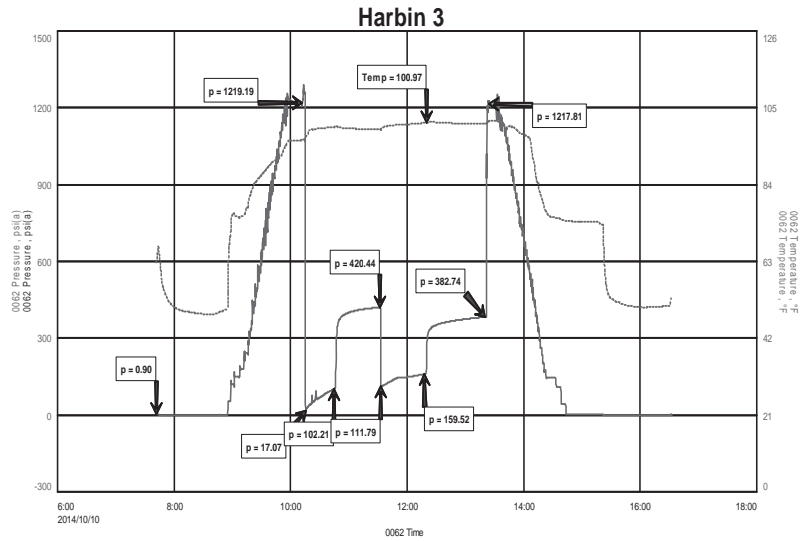
Wellsite Report

General Information

Company Name	BOP West LLC
Contact	Steven W Sigler
Well Operator	BOP West LLC
Well Name	Harbin 3
Surface Location	Sec: 7-16s-1w (Saline County)
Field	Hunter North
Well Type	Vertical
Pool	Infield
Test Purpose (AEUB)	Initial Test
Qualified By	Frank Mize
Gauge Name	0062

Test Information

Job Number	RR097
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 1 Burgff Sand (2560-2685)
Start Test Date	2014/10/10 YYYY/MM/DD
Start Test Time	07:42:00 HH:mm:ss
Final Test Date	2014/10/10 YYYY/MM/DD
Final Test Time	15:53:00 HH:mm:ss



Test Results

Recovery:

15'	GIP			
15'	O	100% O	36 Gravity @ 60 Deg	
332	G w/ HOM	6 % G	37% O	57 % M
347'	Total Fluid			

Tool Sample: 10% G 30% O 60% M