



1105935

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

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

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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 Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> 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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	BOP West, LLC
Well Name	M. Redden 21-2
Doc ID	1105935

Tops

Name	Top	Datum
Heebner	1821	-532
Brown Lime	1974	-685
Lansing	2031	-742
Muncie Creek Shale	2196	-907
Stark Shale	2296	-1007
BKC	2366	-1077
Marmaton	2379	-1090
Cherokee	2545	-1256
Mississippian	2656	-1367

OPERATOR

Company: BOP WEST, LLC
 Address: P.O. BOX 129
 WOOSTER, OHIO 44691

Contact Geologist:
 Contact Phone Nbr: 330-264-8847
 Well Name: M. REDDEN # 21-2
 Location: 330 FNL, 1390 FWL, SEC21-T16S-R1WAPI: 15-169-20343-00-00
 Pool: DRY AND ABANDONED Field: HUNTER
 State: KANSAS Country: SALINE

Scale 1:240 Imperial

Well Name: M. REDDEN # 21-2
 Surface Location: 330 FNL, 1390 FWL, SEC21-T16S-R1W
 Bottom Location:
 API: 15-169-20343-00-00
 License Number: 34439
 Spud Date: 10/18/2012 Time: 7:00 AM
 Region:
 Drilling Completed: 10/22/2012 Time: 12:52 PM
 Surface Coordinates: Y = 116453 & X = 2159665
 Bottom Hole Coordinates:
 Ground Elevation: 1280.00ft
 K.B. Elevation: 1289.00ft
 Logged Interval: 1750.00ft To: 2680.00ft
 Total Depth: 2680.00ft
 Formation: MISSISSIPPIAN
 Drilling Fluid Type: CHEMICAL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: Y = 116453
 E/W Co-ord: X = 2159665

CASING SUMMARY

	Surface	Intermediate	Main		
Bit Size	12.25 in				
Hole Size	12.25 in				
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8.625 in	219 ft	24#		10/18/2012 9:40 PM
Int Casing					
Prod Casing					

CASING SEQUENCE

Type	Hole Size	Casing Size	At
SURFACE	12.25 in	8.63	219.00 ft

CONTRACTOR

Contractor: C + G DRILLING CO.
 Rig #: 2
 Rig Type: DOUBLE PORTABLE
 Spud Date: 10/18/2012 Time: 7:00 AM
 TD Date: 10/22/2012 Time: 12:52 PM
 Rig Release: Time:

LOGGED BY

Company: LARRY P. FRIEND
 Address: 1639 BURNS ST.
 WICHITA, KS 67203-2757

Phone Nbr: 316-265-2228

FORMATION DEPTHS

FORMATION DEPTHS:	SAMPLE	COMPARISON TO:
		BOP WEST, LLC, 1 MAX REDDEN 530 FSL, 1170 FWL, 21-T16S-R1W
HEEBNER	1821 (-532)	-11
BROWN LIME	1974 (-685)	-8
LANSING	2031 (-742)	-14
MUNCIE CREEK SH.	2196 (-907)	-12
STARK SHALE	2296 (-1007)	-15
BKC	2366 (-1077)	-14
MARMATON	2379 (-1090)	-15
CHEROKEE	2545 (-1256)	-7
MISSISSIPPIAN	2656 (-1367)	-31

NOTES

DUE TO THE LACK OF DOLOMITE AND SHOWS IN THE MISS, A LACK OF ANY OTHER POSITIVE OIL SHOWS AND A POOR STRUCTURAL POSITION, IT WAS DECIDED TO PLUG AND ABANDON THIS TEST.
RESPECTFULLY SUBMITTED,
LARRY P. FRIEND

ROCK TYPES

Cht	Lmst fw<7	Shgy	Slst
Coal	Lmst fw>7	Shblk	
Dolsec	Ss	Shcol	

ACCESSORIES

MINERAL

- Argillaceous
- ▲ Chert, dark
- △ Dolomitic
- Sandy
- ^ Siliceous
- ** Silty

FOSSIL

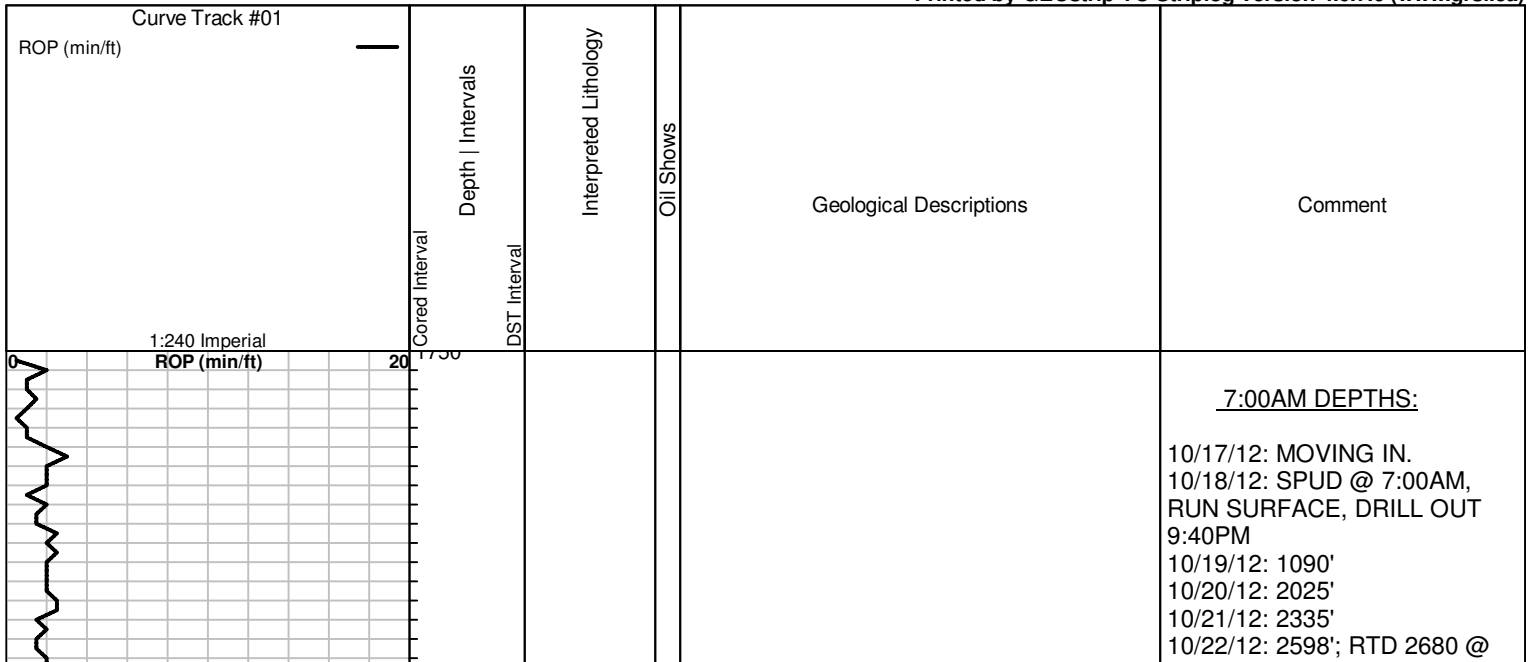
- ◊ Oolites

OTHER SYMBOLS

OIL SHOWS

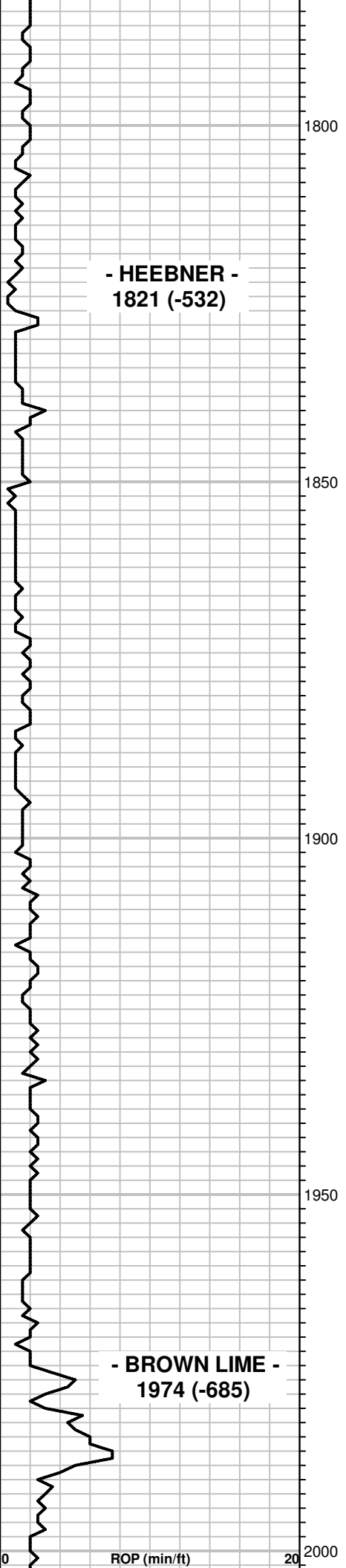
- Even Stn
- Spotted Stn 50 - 75 %
- Spotted Stn 25 - 50 %
- Spotted Stn 1 - 25 %
- Questionable Stn
- D Dead Oil Stn
- Fluorescence

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)



DEVIATION SURVEYS:

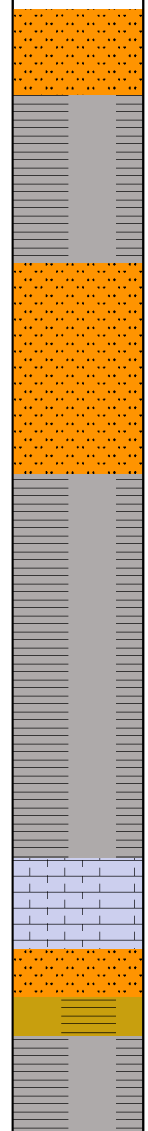
.25 DEGREES @ 1247'
.5 DEGREES @ 1902'



**- HEEBNER -
1821 (-532)**

**- BROWN LIME -
1974 (-685)**

ROP (min/ft)



10: LT. GRY, TITE SILTSTONE; TR. DK. SHALE/ COAL LAYERS.

20: SHALE, GRY.

30: LT. GRY, SLI. MICA. SILTSTONE, TITE; TR. PYRITE

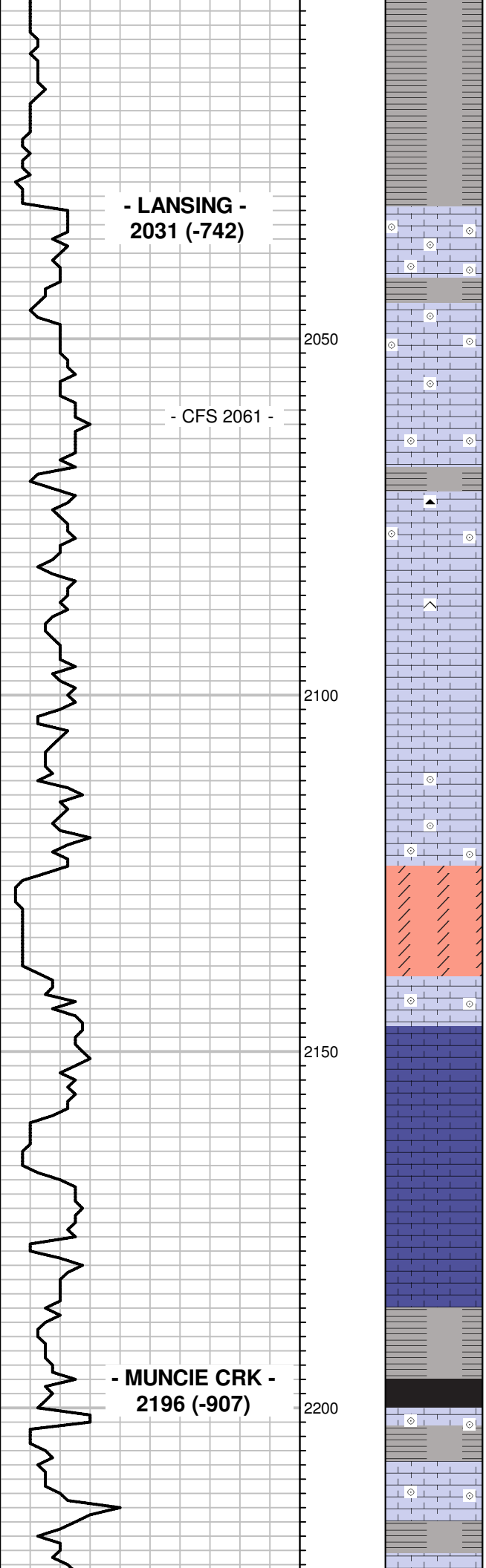
40: SILTSTONE, AS ABOVE; TR. V. THIN DK. SHLAE / COAL LAYERS; TR. PYRITE.

50, 60, 70: SHALE, GRY.

80: TR. LS, BRN, VFXLN, FOSS., DSE; NS

90 & 100: LS, GRY - BRN, VF-FXLN, FOSS, DSE; AND MUCH REDDISH-BRN (RUSTY) LMY SILTSTONE, SLI. SHALEY; TR. REDDISH-BRN SHALE; NS

SAMPLES STARTED AT 1900'.



10, 20, 30: SHALE, GRY.

40: TR. LS, TAN - BRN, VF-FXLN, FOSS, PR. VIS. POR; NS

50: LS, CRM- BRN, V. OOLITIC, SOME FN / SOME MED. OOLITES, TR. SLI. CHLKY, TR. FR. INTER-OOL. XLN. POR; NS

60: LS, BRN, VF-FXLN, V. OOLITIC, PR. - FR. XLN. POR & TR. MOSTLY PR- 1 PC. FR. OOLIC. POR, SM. SLI. CHLKY IN DRY, SM. CALCITE FILL, FSFO (MOSTLY V. LT.- TR. BRN), PR. SPTY BRN SAT. STN, TR. SPTY. FLUOR, FR. FLUSH CUT, SLI. ODOR (LOOKS TITE)

61 CIRC: LS, BRN, FXLN, OOLITIC, PR. XLN. POR; NS

80: LS, CRM - BRN, FXLN, FOSS, SOME SLI. CHLKY, PR - FR. XLN. POR; TR. CHERT, BRN; SHALE, GRY; NS

90: LS, TAN-BRN, SLI. - TR. V. FOSS / OOLITIC PR. VIS. POR; SHALE, GRY; NS

100: LS, TAN, FXLN, SOME FOSS, PR - TR. FR. XLN. POR, SM. AMT. CHERY; SHALE, GRY; PYRITE; NS

10: LS, BRN, VFXLN, FOSS, SOME WEATH, PR. POR; SHALE, GRY, LT. GRN; NS

20: LS, BRN, V. FOSS, SLI. WEATHERED, PR. POR; NS

30: LS, BRN, V. FOSS. / OOLITIC, PR. POR; INC. GRY SHALE IN SAMPLE; NS

40: DOLOMITE, FXLN, TAN, SLI. SUC, FR - GD. PPT - VUG. SOLUTION POR, ALSO FR. XLN. POR; NS, NO FLUOR.

50: LS, TAN-BRN, V. OOLITIC, SOME SLI. WEATH, PR. - TR. FR. XLN POR; NS

60: LS, BRN, VFXLN, DSE; NS

70: LS, CRM - TAN, SOFT, SLI. CHLKY; NS

80: LS, TAN-BRN, VF-FXLN, DSE TO PR. XLN. POR; NS

90: LS, AS ABV; TR. GRY SILTSTONE; SHALE, GRY; NS

100: LS, DK. GRY- BRN, FXLN, SOME SHLY AND SHALE, GRY; NS

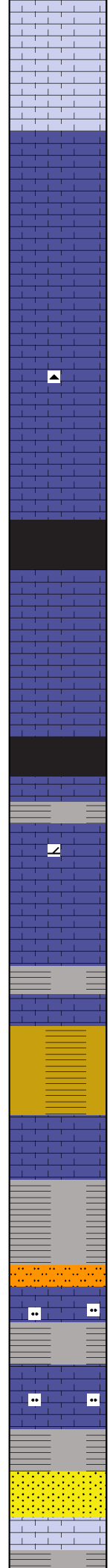
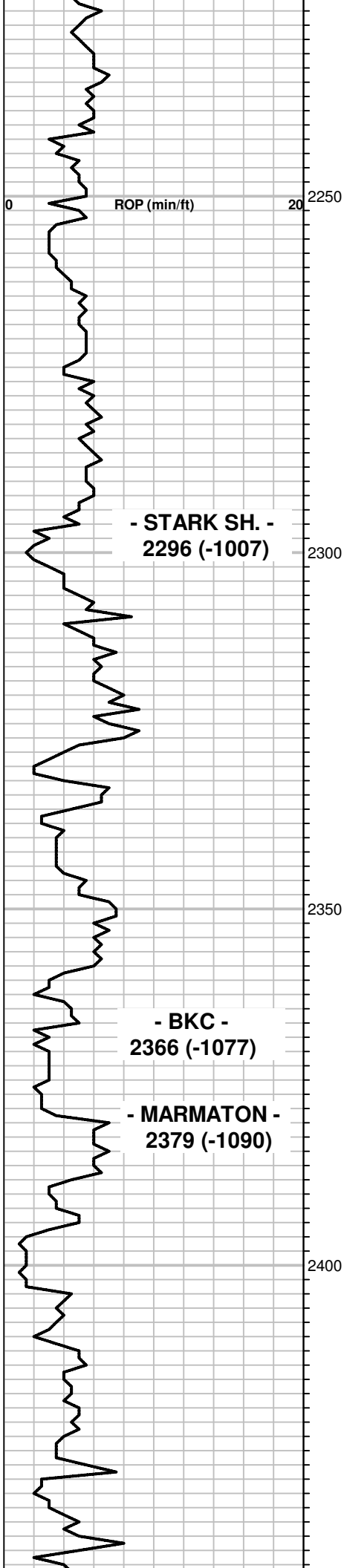
10: TR. BLK. SHALE, CARBONACEOUS; LS, BRN, V. OOLITIC, PR. POR; NS

20: SHALE, GRY AND LS, TAN, VFXLN, FAINTLY OOLITIC, DSE; NS

30: INC. GRY SHALE AND TR. LS, TAN-BRN, VFXLN, SM. FOSS, DSE; NS

PUMP PRESSURE DOWN TO 325#, SOME SHALE SLUFF.

MUD AT 2080:
 WT: 9.3
 VIS: 30
 FILT: 26
 CHLOR: 1,450
 LCM: 0#



40: TR. LS, TAN-BRN, VFXLN, TR. FOSS, DSE; MOSTLY GRY SHALE IN SAMPLE; NS

50: LS, BRN, FXLN, V. FOSS, PR- TR. FR. XLN. POR; SHALE, GRY; NS

60: LS, BRN, VFXLN, DSE; NS

70: LS, AS ABV TO SOME CRM, WEATHERED, SLI. CHLKY; TR. LS, GRY, V. FOSS, CALCITIC, PR. VIS. POR; NS

80 & 90: LS, BRN, VFXLN, SLI. CALCITIC, DSE TO LIT. CRM, WEATHERED, SLI. CHLKY; TR. CHERT, BRN; NS

100 & 10: LS, AS ABOVE; NS

20: SHALE, BLK, CARBONACEOUS; LS, CRM - TAN, VF-FXLN, SM. SLI. WEATH, SLI. CHLKY, PR - FR. XLN. POR; NS

30: LS, BRN, VF-FXLN, SLI. CALCITIC, DSE; NS

40: SHALE, BLK; LS, BRN, VFXLN, DSE; TR. PYRITE; NS

50: LS, TAN, FXLN, SLI. SUCROSIC (SLI. DOLOMITIC?) W/ PR - FR. XLN. POR; TR. CHERT, TAN; NS

70: LS, TAN-BRN, VFXLN, V. SLI. FOSS, DSE; NS

80: SHALE, GRY & LT. GREEN; TR. PYRITE.

90 & 100: LS, BRN - DK. BRN, VFXLN, SLI. FOSS, DSE; NS

10: SHALE, GRY & GRN; NS

20: GRY LS, SILTY, SHLY; TR. SILTSTN, LMY, MICA; SHALE, GRY.

30: LS, GRY, SHLY, SLI. SILTY; TR. LMY. SILTSTN; SHALE, GRY

40: SST, WH, VF-MED, CLR - FROST. GRNS, SBANG, PR, SORT, MOSTLY TITELY CEM W/ LMY CEM, TR. FR. INTERGRAN. POR, 5-7% W/ FSFO, SPTY BRN. SAT. STN, NO FLUOR OR FLUSH CUT BUT GD CRUSH CUT, NO ODOR.

50: LS, TAN-BRN, VFXLN, FOSS, DSE - PR.

PUMP PRESSURE 400#
CARRYING MUCH GRY SHALE
SLUFF IN SAMPLES

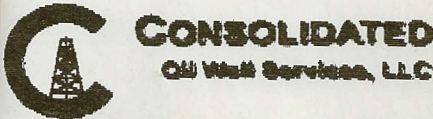
SAMPLES 50% GRY SHALE
SLUFF.

SAMPLES GOOD

PUMP PRESSURE 350#.

BIT TRIP AT 2358' AND WORK
ON MUD PUMP. PUMP
PRESSURE BACK TO 450#
NO PIPE STRAP.

MUD AT 2358:
WT: 9.4
VIS: 40
FILT: 19+
CHLOR: 1,300



PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

API# 15-169-20343

TICKET NUMBER 35622
LOCATION Eureka
FOREMAN Rick Ledford

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10/18/12	1754	M. Redden 21-2	21	16S	1W	Saline
CUSTOMER			TRUCK # DRIVER TRUCK # DRIVER			
BOP West LLC			520 John			
MAILING ADDRESS			479 Merle			
P.O. Box 129						
CITY	STATE	ZIP CODE				
Wooster	OH	44691				

JOB TYPE surface HOLE SIZE 12 1/4" HOLE DEPTH 219' CASING SIZE & WEIGHT 8 5/8"
 CASING DEPTH 219' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 15# SLURRY VOL 34 bbl WATER gal/sk 6.5 CEMENT LEFT IN CASING 20'
 DISPLACEMENT 12.6 bbl DISPLACEMENT PSI 100 MIX PSI _____ RATE _____

REMARKS: Safety meeting. Rig up to 8 5/8" casing. Break circulation w/ 10 bbl water.
Mixed 140 sacks class A cement w/ 370 cells, 270 gal + 14# floccle/sk @ 15#/gal. Displace
w/ 12.6 bbl water. Shut casing in w/ good cement returns to surface = 5 bbl slurry to pit.
Job complete. Rig down.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54013	1	PUMP CHARGE	925.00	925.00
5406	100	MILEAGE	4.00	400.00
11043	140 sacks	class A cement	14.95	2093.00
1102	375#	370 cells	.74	292.30
11188	264#	270 gal	.21	55.44
1107	35#	14# floccle/sk	2.35	82.25
5407A	6.92	tax mileage bulk trk	1.34	927.28
			Subtotal	4675.27
			SALES TAX 7.3%	194.18
			ESTIMATED TOTAL	4859.45

Ravin 3737

AUTHORIZATION R. Coulter TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this for

