[redacted]

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1251279

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 # 34318
Name: BEREXCO LLC
Address 1: 2020 N. Bramblewood
Address 2:
City: Wichita State: KS Zip: 67206 + 1094
Contact Person: Evan Mayhew
Phone: (316) 265-3311
CONTRACTOR: License # 34317
Name: BEREDCO LLC
Wellsite Geologist: Edwin H. Grieves
Purchaser: Central Crude Corporation

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 #:

01/28/2015 Spud Date or Recompletion Date
02/10/2015 Date Reached TD
04/22/2015 Completion Date or Recompletion Date

API No. 15 - 15-055-22379-00-00
Spot Description:
SE - NE - SW - SE Sec. 20 Twp. 23 S. R. 32 ☐ East ☑ West
834 Feet from ☐ North / ☑ South Line of Section
1479 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Finney
Lease Name: Walker Well #: 10-20
Field Name: Congdon North Field
Producing Formation: St. Louis, Ft. Scott
Elevation: Ground: 2850 Kelly Bushing: 2862
Total Vertical Depth: 4964 Plug Back Total Depth: 4914
Amount of Surface Pipe Set and Cemented at: 1751 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 3233 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: 11200 ppm Fluid volume: 900 bbls
Dewatering method used: Evaporated
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: 05/01/2015
☑ **Confidential Release Date:** 04/30/2017
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 05/01/2015

[redacted]

1251279

Operator Name: BEREXCO LLC Lease Name: Walker Well #: 10-20

Sec. 20 Twp. 23 S. R. 32 ☐ East ☑ West County: Finney

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	1751	65/35 POZMIX,Class A	775	6%gel, 1/4#flakes, 3%CC
Production	7.875	5.50	15.5	4965	65/35 POZMIX, ASC	600	6%gel, 1/4#flakes, 10%salt, 6# Gilsonite,

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	-			
	-			

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 *(Amount and Kind of Material Used)*	Depth
4	4778-4791 St. Louis	1000 gals 15% MCA	4778 - 4791
4	4503 - 4507 Ft. Scott	500 gals 15% MCA	4503 - 4507
	4503 - 4507 Ft. Scott	1250 gals 20% SGA	4503 - 4507

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:
	2.375	SN @ 4892	no pkr	☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR.	Producing Method:
04/22/2015	☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	32	0	28		29

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)*	4503 - 4791

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Walker 10-20
Doc ID	1251279

All Electric Logs Run

Borehole Compensated Sonic Array Log
Dual Spaced Neutron Spectral Density Log
Array Compensated True Resistivity Log
Microlog

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Walker 10-20
Doc ID	1251279

Tops

Name	Top	Datum
Heebner (base)	3830	-968
Toronto	3842	-980
Lansing	3869	-1007
KS City	4232	-1370
KS City (base)	4366	1504
Marmaton	4388	-1426
Pawnee	4464	-1602
Ft. Scott	4496	-1634
Cherokee	4515	-1653
Morrow	4684	-1822
St. Louis	4777	-1915
RTD	4970	-2108
LTD	4964	-2102

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Walker 10-20
Doc ID	1251279

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1751	65/35 POZMIX, Class A	775	6%gel, 1/4#flakes, 3%CC
Production	7.875	5.50	15.5	4965	65/35 POZMIX, ASC	600	6%gel, 1/4#flakes, 10%salt, 6# Gilsonite, 0.5%fluid loss, 1/4% defoamer

ALLIED OIL & GAS SERVICES, LLC 064814

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley KS

DATE	SEC	TWP	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
1-30-15	20	23	32		7:00 a.m.	4:00 p.m	5:00 p.m

LEASE	WELL #	LOCATION	COUNTY	STATE
Walker	10-20	Garden City N to Lamb Rd,	Finney	KS

OLD OR (NEW) (Circle one) — 1E to 3rd, 1.5 S to Lane, 3/4 E, N into

CONTRACTOR Beredco 1

TYPE OF JOB Surface

HOLE SIZE 12¼ T.D. 1756'

CASING SIZE 8 5/8 DEPTH 1751'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES: MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 42'

PERFS.

DISPLACEMENT 109.18 bbl H20

OWNER Same

EQUIPMENT

PUMP TRUCK # 431 CEMENTER Paul Beaver

HELPER Brandon Wilkinson

BULK TRUCK # 818/281 DRIVER George Grant

BULK TRUCK #544/198 DRIVER Brian Long (RB)

CEMENT

AMOUNT ORDERED 450 sks Lite (65/35/6) 3% CC 1/4# Flo-seal, 150 sks Com 3% CC

COMMON	150 sks	@ 17.90	2685.00
POZMIX		@	
GEL		@	
CHLORIDE	2130 #	@ 1.10	2332.00
ASC		@	
Lite (65/35/6)	450 sks	@ 19.88	12,922.00
Flo-seal	163 #	@ 2.97	484.11
		@	
Materials Serial		@	18,423.11
		@	
(8290.39/453)		@	
		@	
		@	
HANDLING	909.35 sk	@ 2.48	2255.20
MILEAGE	1144.88 ton/mi	x 2.75	3148.41
		TOTAL	

REMARKS:

Run Pipe / Float equip / Drop ball, pump ball through @ 400 #, Circ, mix 450 sks Lite, tail w/ 150 sks Com, release plug, Displace w/ water, plug did land @ 700 #, Lift 500 #, cement did circ (20 bbl to pit)

4hr waiting charge

Thank You!
Paul + Crew

SERVICE

DEPTH OF JOB	1756'		
PUMP TRUCK CHARGE	2213.75		
EXTRA FOOTAGE		@	
MILEAGE	mi/hv 30	@ 7.70	231.00
MANIFOLD	Head	@	N/C
	m.i.v 30	@ 4.40	132.00
	waiting charge 3	@ 440.00	1320.00
(4185.17/453)		TOTAL	9,300.36

CHARGE TO: Beredco llc

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8 Industrial Rubber + Weatherford

(F)	8 5/8 Guide shoe		@	460.00
(J)	8 5/8 AFU Float Valve		@	447.00
(L)	8 5/8 Top Rubber Plug		@	131.00
(T)	Centralizer	1	@ 75.00	75.00
(W)	Centralizers	2	@ 75.00	150.00
(568.35/453)			TOTAL	1,263.00

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)

TOTAL CHARGES 28,986.47

DISCOUNT (3043.91/453) IF PAID IN 30 DAYS

15,942.55 Net

PRINTED NAME Dave Engleman

SIGNATURE Dave Engleman

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 1-30-15 District Oakley KS Ticket No. 64814
Company Beredco Rig Beredco 1
Lease Walker Well No. 10-20
County Finney State KS
Location 20-23-32 Field

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☒ Intermediate ☐ Production ☐ Liner ☐
Size 8 5/8 Type New Weight 24# Collar

Casing Depths: Top KB Bottom 1756'

Drill Pipe: Size Weight Collars
Open Hole: Size 12 1/4 T.D. 1756 ft. P.B. to ft.

CAPACITY FACTORS:
Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl.
Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.
Drill Pipe: Bbls/Lin. ft. Lin. ft./Bbl.
Annulus: Bbls/Lin. ft. Lin. ft./Bbl.
Bbls/Lin. ft. Lin. ft./Bbl.
Perforations: From ft. to ft. Amt.

CEMENT DATA:
Spacer Type:
Amt. Sks Yield ft³/sk Density PPG

LEAD: Pump Time hrs. Type 65/35 6% gel 3% CC 1/4# Flo-Seal Excess
Amt. 650 Sks Yield 1.97 ft³/sk Density 12.5 PPG
TAIL: Pump Time hrs. Type Com 3% CC Excess
Amt. 150 Sks Yield 1.18 ft³/sk Density 15.5 PPG
WATER: Lead 10.7 gals/sk Tail 5.2 gals/sk Total Bbls.

Pump Trucks Used 431 - Brandon W
Bulk Equip. 818/287 - George
544-198 - Brian Lang

Float Equip: Manufacturer Industrial / weatherford
Shoe: Type Guide shoe Depth 1756
Float: Type AFU Flapper Float valve Depth 1714
Centralizers: Quantity 3 Plugs Top ✓ Btm.
Stage Collars
Special Equip.
Disp. Fluid Type water Amt. 109.18 Bbls. Weight PPG
Mud Type 40 vis Weight PPG

COMPANY REPRESENTATIVE CEMENTER Paul Beaver

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	PRESSURES PSI ANNULUS	FLUID PUMPED DATA TOTAL FLUID	FLUID PUMPED DATA Pumped Per Time Period	FLUID PUMPED DATA RATE Bbls Min.	REMARKS
						Hold Safety meeting
						Run Pipe / Float equip
						Drop ball / pumped Ball Through @ 400#
4:00						Circ 1hr
	200		165.59	165.59	6	start cement
	200		18.57	184.16	6	mix 650 sks Lite @ 12.5#
						tail in 150 sks Com @ 15.5#
						stop cement
						release plug
	200		10.0	194.16	4	Displace w/ water
	200		10.0	204.16	4	
	200		10.0	214.16	4	
	200		10.0	224.16	4	
	200		10.0	234.16	4	
	300		10.0	244.16	4	
	300		10.0	254.16	4	
	400		10.0	264.16	4	
	400		10.0	274.16	4	
	500		10.0	284.16	3	
5:00	500		9.18	293.34	2	plug did land @ 700#
						Lift 500#

FINAL DISP. PRESS: PSI BUMP PLUG TO PSI BLEEDBACK BBLS. THANK YOU

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET

FILE: WLKR1-20DST1

TIME ON: 1920 (2/4)

TIME OFF: 0820 (2/5)

Company BEREXCO LLC — Lease & Well No. WALKER #10-20

Contractor BEREDCO LLC RIG 1 — Charge to BEREXCO LLC

Elevation 2850 GL Formation MARMATON Effective Pay ____ Ft. Ticket No. M748

Date 2/4/2015 Sec. 20 Twp. 23 S Range 32 W County FINNEY State KANSAS

Test Approved By EDWIN H. GRIEVES — Diamond Representative MIKE COCHRAN

Formation Test No. 1 Interval Tested from 4419 ft. to 4450 ft. Total Depth 4450 ft.

Packer Depth 4414 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4419 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4401 ft. — Recorder Number 5448 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4421 ft. — Recorder Number 0063 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth -- ft. — Recorder Number -- Cap. -- P.S.I.

Mud Type CHEM Viscosity 50 — Drill Collar Length 620 ft. I.D. 2 1/4 in.

Weight 9.4 Water Loss 7.6 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,600 P.P.M. — Drill Pipe Length 3767 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 — Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO — Anchor Length 31 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: GSB, BOB 17 MIN (NO BB)

2nd Open: SSB, BUILT TO 9" (NO BB)

Recovered 485 ft. of GIP

Recovered ~5 ft. of CO 100% OIL

Recovered ~130 ft. of HOCM 40% OIL, 60% MUD

Recovered 135 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of GRAVITY: 29.5 @ 60°

Remarks: ____

TOOL SAMPLE: 80% OIL,20% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 11:45 P.M. A.M. P.M. Time Started Off Bottom 4:15 A.M. A.M. P.M. Maximum Temperature 110°F

Initial Hydrostatic Pressure ..... (A) 2199 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 20 P.S.I. to (C) 42 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 276 P.S.I.

Final Flow Period ..... Minutes 60 (E) 48 P.S.I. to (F) 62 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 226 P.S.I.

Final Hydrostatic Pressure ..... (H) 2178 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**BEREXCO LLC**	**Job Number**	**M748**
Well Name	**WALKER #10-20**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#1 4419-4450 MARMATON**	**Well Operator**	**BEREXCO LLC**
Surface Location	**SEC.20-23S-32W FINNEY CO.KS.**	**Report Date**	**2014/02/05**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**EDWIN H. GRIEVES**
		Test Unit	**NO. 3**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#1 4419-4450 MARMATON**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2014/02/04**	**Start Test Time**	**19:20:00**
Final Test Date	**2014/02/05**	**Final Test Time**	**08:20:00**
		Well Fluid Type	**01 Oil**

Gauge Name	**5448**
Gauge Serial Number	

Test Results

Remarks **RECOVERED:**

485' GIP
~5' CO 100% OIL
~130' HOCM 40% OIL, 60% MUD
135' TOTAL FLUID

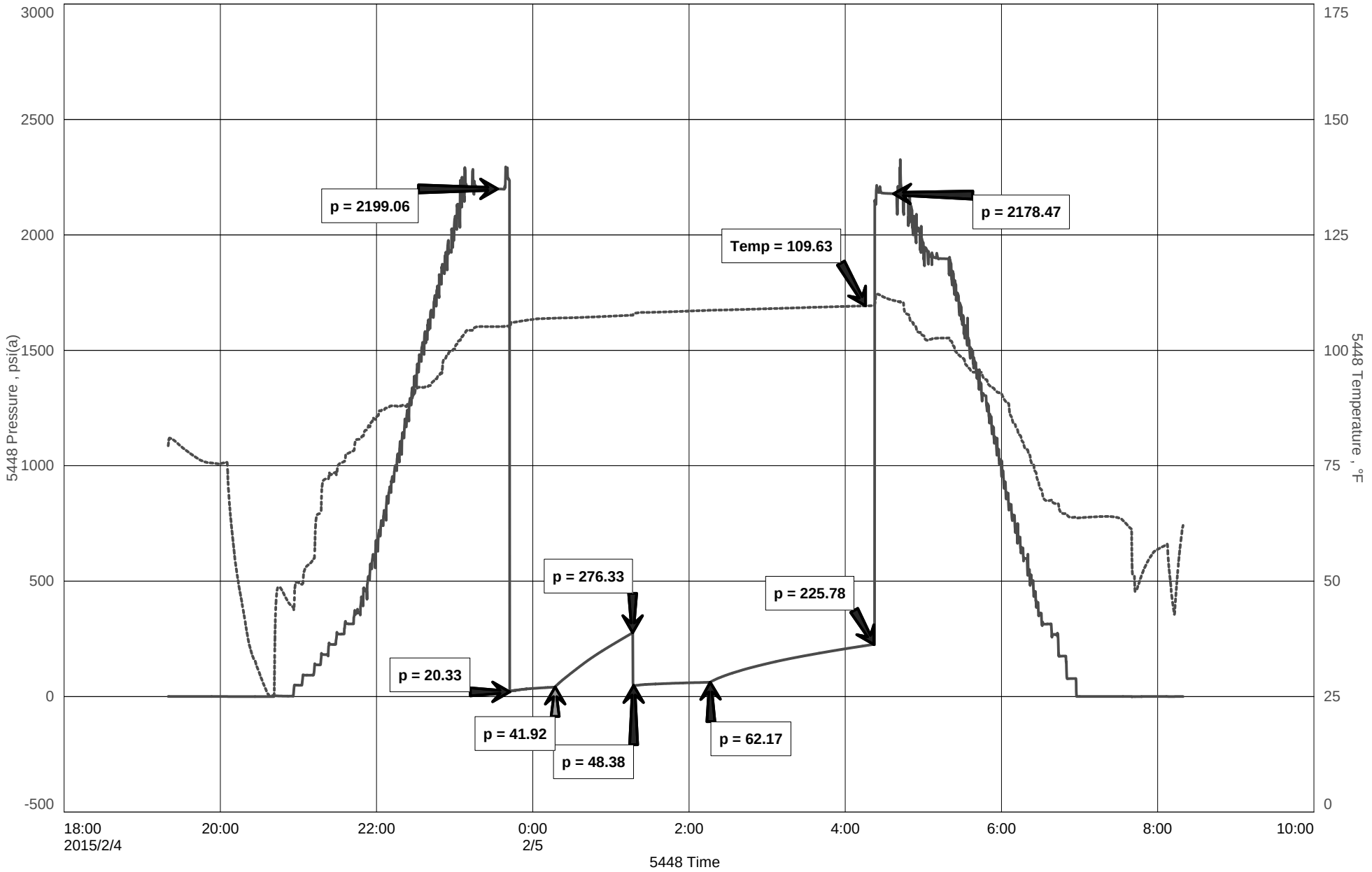
GRAVITY: 29.5 @ 60 DEG

TOOL SAMPLE: 80% OIL,20% MUD

BEREXCO LLC
DST#1 4419-4450 MARMATON
Start Test Date: 2014/02/04
Final Test Date: 2014/02/05

WALKER #10-20
Formation: DST#1 4419-4450 MARMATON
Pool: WILDCAT
Job Number: M748

WALKER #10-20



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET

FILE: WLKR1-20DST2

TIME ON: 0415

TIME OFF: 1640

Company BEREXCO LLC — Lease & Well No. WALKER #10-20

Contractor BEREDCO LLC RIG 1 — Charge to BEREXCO LLC

Elevation 2850 GL Formation FT.SCOTT Effective Pay _____ Ft. Ticket No. M749

Date 2/6/2015 Sec. 20 Twp. 23 S Range 32 W County FINNEY State KANSAS

Test Approved By EDWIN H. GRIEVES — Diamond Representative MIKE COCHRAN

Formation Test No. 2 Interval Tested from 4495 ft. to 4515 ft. Total Depth 4515 ft.

Packer Depth 4490 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4495 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4477 ft. — Recorder Number 5448 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4497 ft. — Recorder Number 0063 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth -- ft. — Recorder Number -- Cap. -- P.S.I.

Mud Type CHEM Viscosity 60 — Drill Collar Length 620 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 6.8 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,550 P.P.M. — Drill Pipe Length 3843 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 — Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO — Anchor Length 20 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: WSB, BUILT TO 5½" (NO BB)

2nd Open: WSB, BUILT TO 9" (1" BB)

Recovered 758 ft. of GIP — GRAVITY: 31.7 @ 60°

Recovered 89 ft. of CO 100% OIL

Recovered 177 ft. of OCGWM 20% GAS, 45% OIL, 8% WTR, 27% MUD

Recovered 66 ft. of GOCWM 26% GAS, 26% OIL, 18% WTR, 30% MUD

Recovered 332 ft. of TOTAL FLUID

Recovered _____ ft. of CHLOR: 33,000 PPM

Remarks: RW: .27 @ 70 DEG

PH: 7.0

TOOL SAMPLE: 2% GAS, 8% OIL,80% WTR, 10% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 8:30 A.M. A.M. P.M. Time Started Off Bottom 1:00 P.M. A.M. P.M. Maximum Temperature 111°F

Initial Hydrostatic Pressure ..... (A) 2051 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 15 P.S.I. to (C) 54 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 594 P.S.I.

Final Flow Period ..... Minutes 60 (E) 62 P.S.I. to (F) 103 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 600 P.S.I.

Final Hydrostatic Pressure ..... (H) 2011 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**BEREXCO LLC**	**Job Number**	**M749**
Well Name	**WALKER #10-20**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#2 4495-4515 FT.SCOTT**	**Well Operator**	**BEREXCO LLC**
Surface Location	**SEC.20-23S-32W FINNEY CO.KS.**	**Report Date**	**2015/02/06**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**EDWIN H. GRIEVES**
		Test Unit	**NO. 3**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#2 4495-4515 FT.SCOTT**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2015/02/06**	**Start Test Time**	**04:15:00**
Final Test Date	**2015/02/06**	**Final Test Time**	**16:40:00**
		Well Fluid Type	**01 Oil**

Gauge Name	**5448**
Gauge Serial Number	

Test Results

Remarks **RECOVERED:**

758' GIP
89' CO 100% OIL
177' OCGWM 20% GAS, 45% OIL, 8% WTR, 27% MUD
66' GOCWM 26% GAS, 26% OIL, 18% WTR, 30% MUD
332' TOTAL FLUID

GRAVITY: 31.7 @ 60 DEG

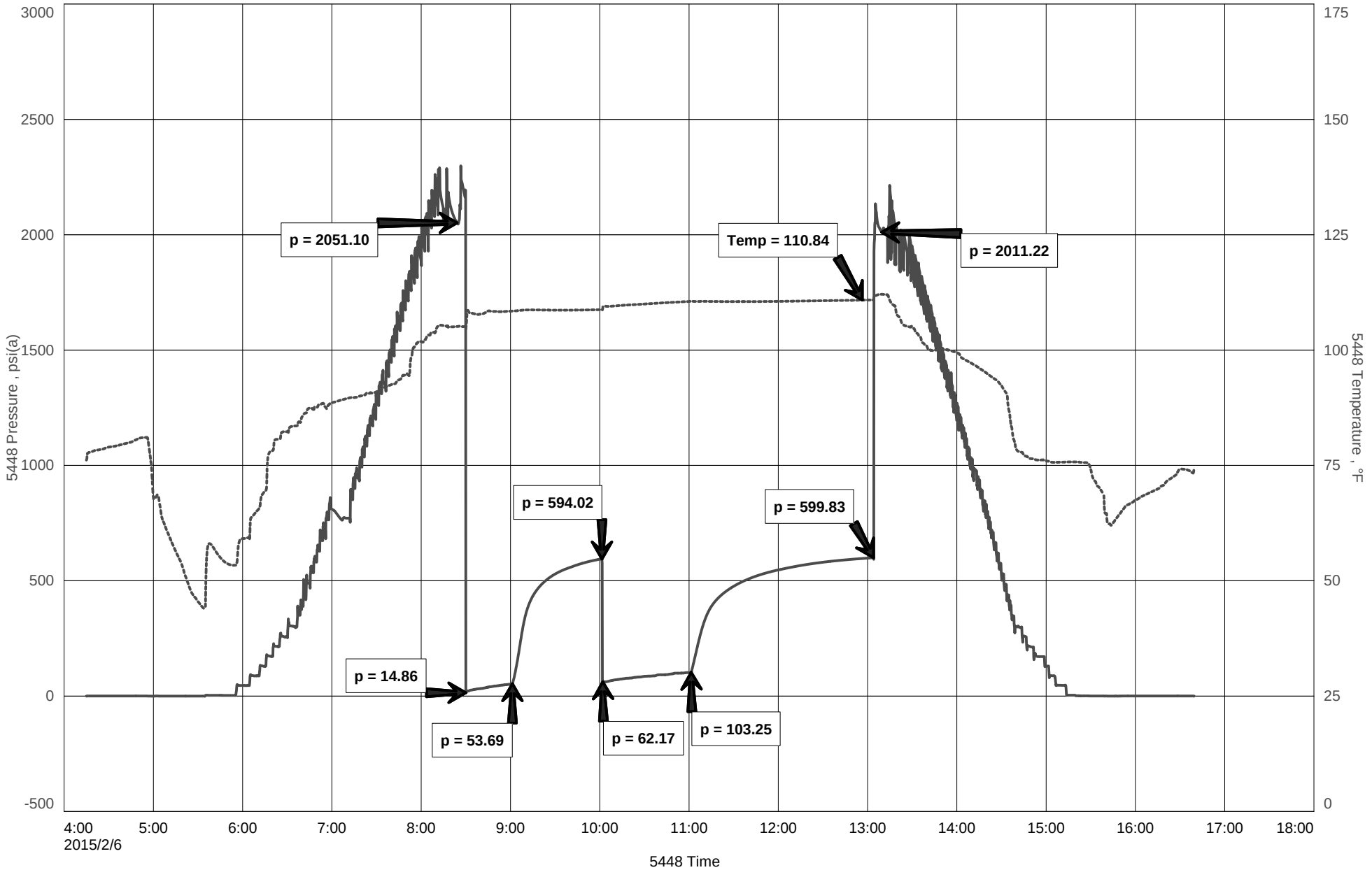
CHLOR: 32,000 PPM
PH:7.0
RW: .27 @ 70 DEG

TOOL SAMPLE: 2% GAS, 8% OIL,80% WTR, 10% MUD

BEREXCO LLC
DST#2 4495-4515 FT.SCOTT
Start Test Date: 2015/02/06
Final Test Date: 2015/02/06

WALKER #10-20
Formation: DST#2 4495-4515 FT.SCOTT
Pool: WILDCAT
Job Number: M749

WALKER #10-20



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET

FILE: WLKR1-20DST3

TIME ON: 0805

TIME OFF: 1830

Company BEREXCO LLC — Lease & Well No. WALKER #10-20

Contractor BEREDCO LLC RIG 1 — Charge to BEREXCO LLC

Elevation 2850 GL Formation MORROW SD ST Effective Pay _____ Ft. Ticket No. M750

Date 2/8/2015 Sec. 20 Twp. 23 S Range 32 W County FINNEY State KANSAS

Test Approved By EDWIN H. GRIEVES — Diamond Representative MIKE COCHRAN

Formation Test No. 3 Interval Tested from 4758 ft. to 4775 ft. Total Depth 4775 ft.

Packer Depth 4753 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4758 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4740 ft. — Recorder Number 5448 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4760 ft. — Recorder Number 0063 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth -- ft. — Recorder Number -- Cap. -- P.S.I.

Mud Type CHEM Viscosity 60 — Drill Collar Length 620 ft. I.D. 2 1/4 in.

Weight 9.0 Water Loss 7.2 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,000 P.P.M. — Drill Pipe Length 4106 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 — Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO — Anchor Length 17 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: VWSB, INCREASE TO1⅛" (NO BB)

2nd Open: NO BLOW (NO BB)

Recovered ~45 ft. of GWM 2% GAS, 46% WTR, 52% MUD

Recovered ~45 ft. of TOTAL FLUID

Recovered _____ ft. of _____

Recovered _____ ft. of CHLOR: 32,000 PPM

Recovered _____ ft. of RW: .30 @ 72 DEG

Recovered _____ ft. of PH: 7.0

Remarks: _____

TOOL SAMPLE: 2% GAS, 43% WTR, 55% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 11:45 A.M. P.M. Time Started Off Bottom 3:45 P.M. A.M. P.M. Maximum Temperature 114°F

Initial Hydrostatic Pressure ..... (A) 2214 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 12 P.S.I. to (C) 29 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 540 P.S.I.

Final Flow Period ..... Minutes 30 (E) 34 P.S.I. to (F) 45 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 524 P.S.I.

Final Hydrostatic Pressure ..... (H) 2207 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**BEREXCO LLC**	**Job Number**	**M750**
Well Name	**WALKER #10-20**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#3 4758-4775 MORROW SD ST**	**Well Operator**	**BEREXCO LLC**
Surface Location	**SEC.20-23S-32W FINNEY CO.KS.**	**Report Date**	**2015/02/08**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**EDWIN H. GRIEVES**
		Test Unit	**NO. 3**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#3 4758-4775 MORROW SD ST**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2015/02/08**	**Start Test Time**	**08:05:00**
Final Test Date	**2015/02/08**	**Final Test Time**	**16:30:00**
		Well Fluid Type	**01 Oil**

Gauge Name	**5448**
Gauge Serial Number	

Test Results

Remarks **RECOVERED:**

~45' GWM 2% GAS, 46% WTR, 52% MUD

~45' TOTAL FLUID

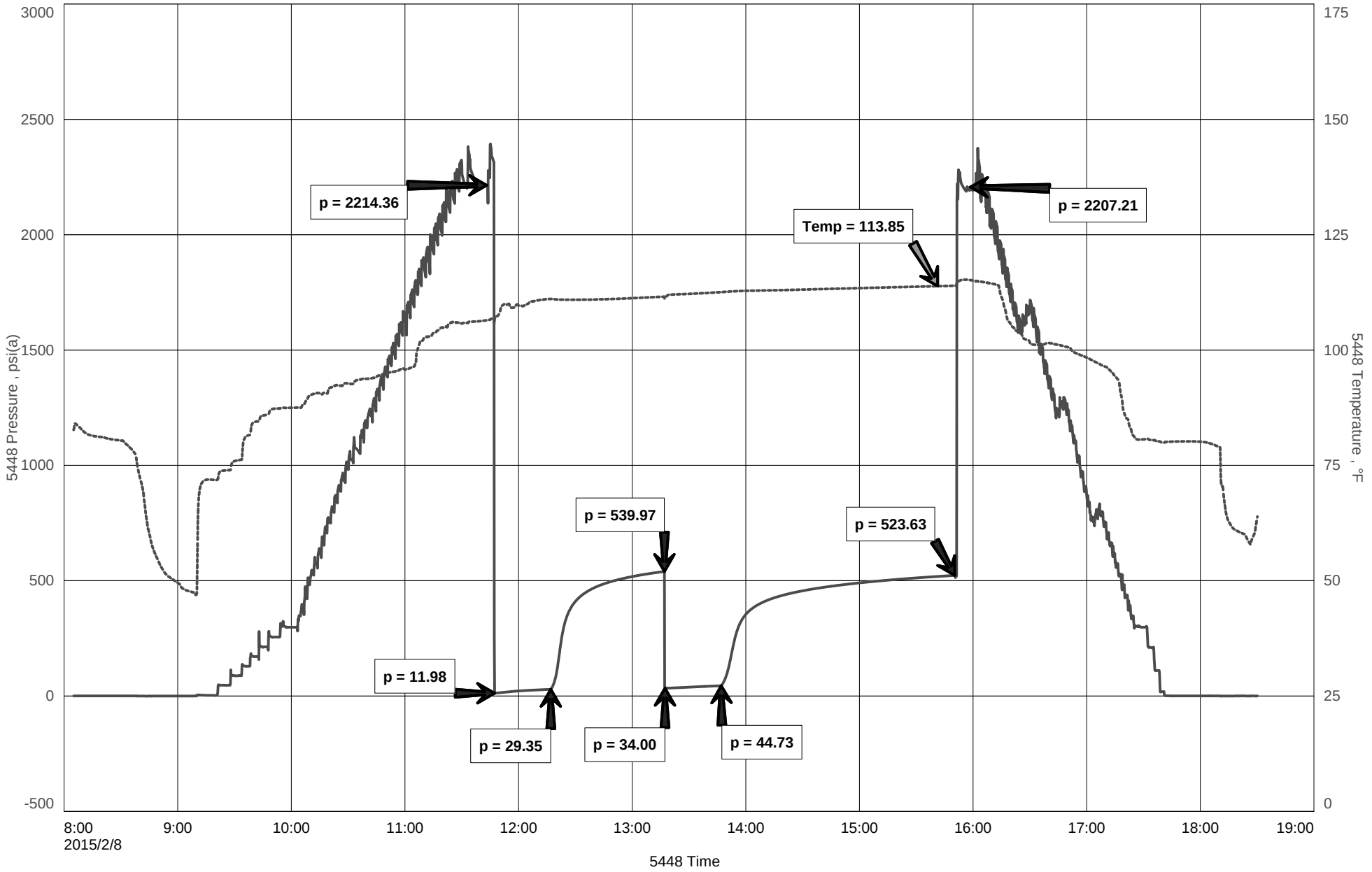
CHLOR: 32,000 PPM
PH:7.0
RW: .30 @ 72 DEG

TOOL SAMPLE: 2% GAS, 43% WTR, 55% MUD

BEREXCO LLC
DST#3 4758-4775 MORROW SD ST
Start Test Date: 2015/02/08
Final Test Date: 2015/02/08

WALKER #10-20
Formation: DST#3 4758-4775 MORROW SD ST
Pool: WILDCAT
Job Number: M750

WALKER #10-20



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET

FILE: WLKR1-20DST4

TIME ON: 0825

TIME OFF: 2100

Company BEREXCO LLC — Lease & Well No. WALKER #10-20

Contractor BEREDCO LLC RIG 1 — Charge to BEREXCO LLC

Elevation 2850 GL Formation ST.LOUIS Effective Pay _____ Ft. Ticket No. M751

Date 2/9/2015 Sec. 20 Twp. 23 S Range 32 W County FINNEY State KANSAS

Test Approved By EDWIN H. GRIEVES — Diamond Representative MIKE COCHRAN

Formation Test No. 4 Interval Tested from 4773 ft. to 4805 ft. Total Depth 4805 ft.

Packer Depth 4768 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4773 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4755 ft. — Recorder Number 5448 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4775 ft. — Recorder Number 0063 Cap. 5,000 P.S.I.

Below Straddle Recorder Depth -- ft. — Recorder Number -- Cap. -- P.S.I.

Mud Type CHEM Viscosity 57 — Drill Collar Length 620 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 7.2 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,100 P.P.M. — Drill Pipe Length 4121 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 — Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO — Anchor Length 32 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: SSB, 2" RIGHT AWAY, BOB 7½ MIN (8" BB)

2nd Open: SSB, 3" RIGHT AWAY, BOB 7 MIN (6" BB)

Recovered 1299 ft. of GIP (1220'DP,79' DC) GRAVITY: 29.4 @ 60°

Recovered 253 ft. of GO 4% GAS, 96% OIL (253' DC)

Recovered 288 ft. of WMGO 15% GAS, 66% OIL, 4% WTR, 15% MUD (288'DC)

Recovered 541 ft. of TOTAL FLUID

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

TOOL SAMPLE: MOSTLY GAS & SOME MUDDY OIL

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 12:45A.M. A.M. P.M. Time Started Off Bottom 5:15 P.M. A.M. P.M. Maximum Temperature 114°F

Initial Hydrostatic Pressure ..... (A) 2254 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 50 P.S.I. to (C) 192 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 311 P.S.I.

Final Flow Period ..... Minutes 60 (E) 196 P.S.I. to (F) 253 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 310 P.S.I.

Final Hydrostatic Pressure ..... (H) 2239 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**BEREXCO LLC**	**Job Number**	**M751**
Well Name	**WALKER #10-20**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#4 4773-4805 ST.LOUIS**	**Well Operator**	**BEREXCO LLC**
Surface Location	**SEC.20-23S-32W FINNEY CO.KS.**	**Report Date**	**2015/08/09**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**EDWIN H. GRIEVES**
		Test Unit	**NO. 3**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#4 4773-4805 ST.LOUIS**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2015/08/09**	**Start Test Time**	**08:05:00**
Final Test Date	**2015/08/09**	**Final Test Time**	**21:00:00**
		Well Fluid Type	**01 Oil**

Gauge Name	**5448**
Gauge Serial Number	

Test Results

Remarks **RECOVERED:**

1299' GIP (1220'DP,79' DC)
253' GO 4% GAS, 96% OIL (253' DC)
288' WMGO 15% GAS, 66% OIL, 4% WTR, 15% MUD (288'DC)
541' TOTAL FLUID

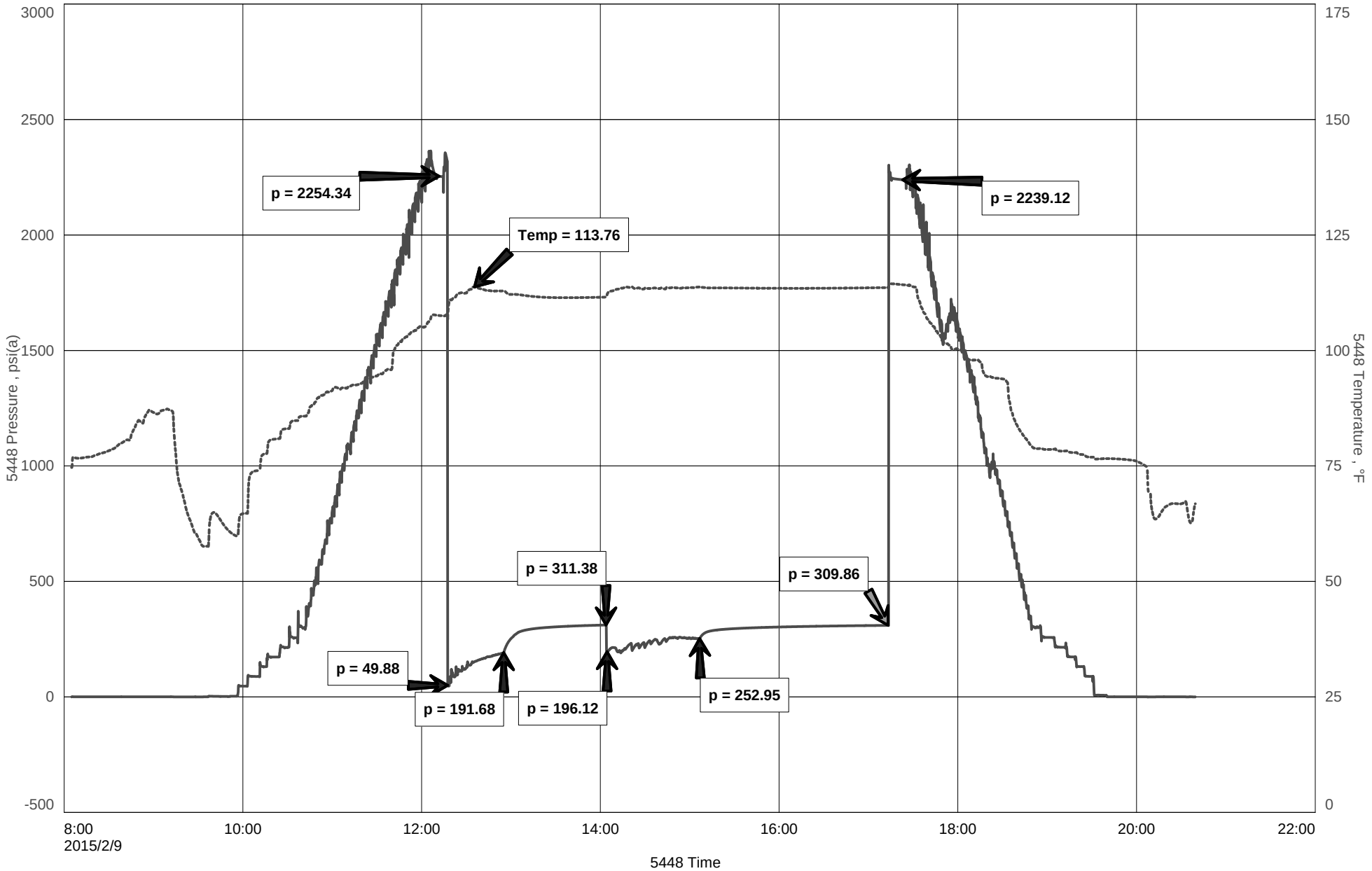
GRAVITY: 29.4 @ 60 DEG

TOOL SAMPLE: MOSTLY GAS & SOME MUDDY OIL

BEREXCO LLC
DST#4 4773-4805 ST.LOUIS
Start Test Date: 2015/08/09
Final Test Date: 2015/08/09

WALKER #10-20
Formation: DST#4 4773-4805 ST.LOUIS
Pool: WILDCAT
Job Number: M751

WALKER #10-20



GEOLOGIST'S REPORT

DRILLING TIME & SAMPLE LOG

COMPANY Berexco LLC

LEASE Walker NO. 10-20

LOCATION 834' FSL + 1479' FEL

SEC. 20 TWP. 23S RNG. 32W

COUNTY Finney, STATE Kansas

FIELD Congdon North

CONTRACTOR Beredco Drlg. Rig #1

COMM. 1-27-2015 COMP. 2-11-2015

RTD 4970 LTD 4964

No. of DST'S Four No. of CORES None

ELEVATIONS

KB 2862

DF 2860

GL 2850

MEASUREMENTS ARE ALL FROM KB

CASING RECORD

8 5/8" @ 1756' w/ ___ SX.

___ @ ___ w/ ___ SX.

___ @ ___ w/ ___ SX.

___ @ ___ w/ ___ SX.

EL. LOG A.C.TRes·SP·GR Den·Neut·GR·Caliper M.L·Sonic·

SAMPLES SAVED FROM 3600 TO TD

DRILLING TIME KEPT FROM 3600 TO TD

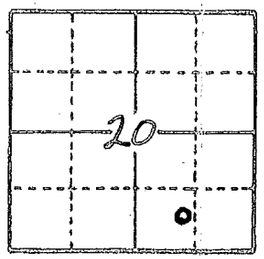
SAMPLES EXAMINED FROM 3600 TO TD

GEOLOGICAL SUPERVISION FROM 3600 TO TD

GEOLOGIST ON WELL Edwin H. Grieves

FORMATION TOPS

	SAMPLE	LOG	SUBSEA
Base Heebner	3832	3830	-968
Toronto	3842	3842	-980
Lansing Fm	3868	3869	-1007
Kansas City Fm	4237	4232	-1370
BKC	4358	4366	-1504
Marmaton	4379	4388	-1526
Pawnee	4467	4464	-1602
Ft Scott	4500	4496	-1634
Cherokee Fm.	4520	4515	-1653
Morrow Fm.	4691	4684	-1822
St Louis	4786	4777	-1915
TD	4970	4964	



API# 15-055-22379

REMARKS Earth-Tech 1-888-543-8378 had an unmanned gas detection trailer on this well from 3600 feet to total depth.

Thank You!

Edwin H. Grieves

Geologist

LITHOLOGY

SANDSTONE

LIMESTONE

SHALE

CHERT

DRILL TIME SCALE

SAMPLE DESCRIPTION

CHROMATOGRAPH

SYSTONE

DOLOMITE

GRANITE WASH

ANH & GYP

HOT WIRE BY TOTAL GAS VOLUME

C1 = METHANE
C2 = ETHANE
C3 = PROPANE
C4 = BUTANE
C5 = ISOPENTANE
C6 = PENTANE

GAS SCALE

10 100 1000

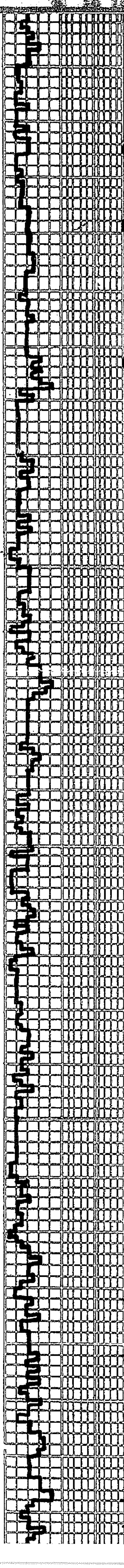
3600

SHALE | CHERT | GRANITE WASH | ANHY & GYP

TOTAL GAS VOLUME

C4 = BUTANE
C5 = ISOPENTANE
C5 = PENTANE

DRILL TIME SCALE	SAMPLE DESCRIPTION		GAS SCALE
5 10 15			10 100 1000



3600

Interbed. Lmst. & scattered thin Shs
(1.) Slower Drlg. Lms. lt. gry, grayish tan to tan; crypto. to v.v. fn. xln; subchlk, sub-sucro & packstn; dul. yel. fluor. IP's; No Cut No Vis Por
(2.) Faster Drlg Lms. trs to abn. wht. to crm chlk & grayish. tan to tan; crypto to v.v. fn. xln.; trs. sub-chlk, sub-sucro to sucro & trs packstn.; phantom oolitic IP's; dul. yel. to dul. lt. yel. & trs lt. yel. fluor No Cut; abn. pr. to fr & trs. gd. micro-pp to interxln por.
(3.) scattered thin Shs med to drk gry.; sl. to v. calc IP's

3700

— Sh. v. drk gry to black - carb —

Interbed. Lmst & scattered thin Shs
Similar 3600-3732

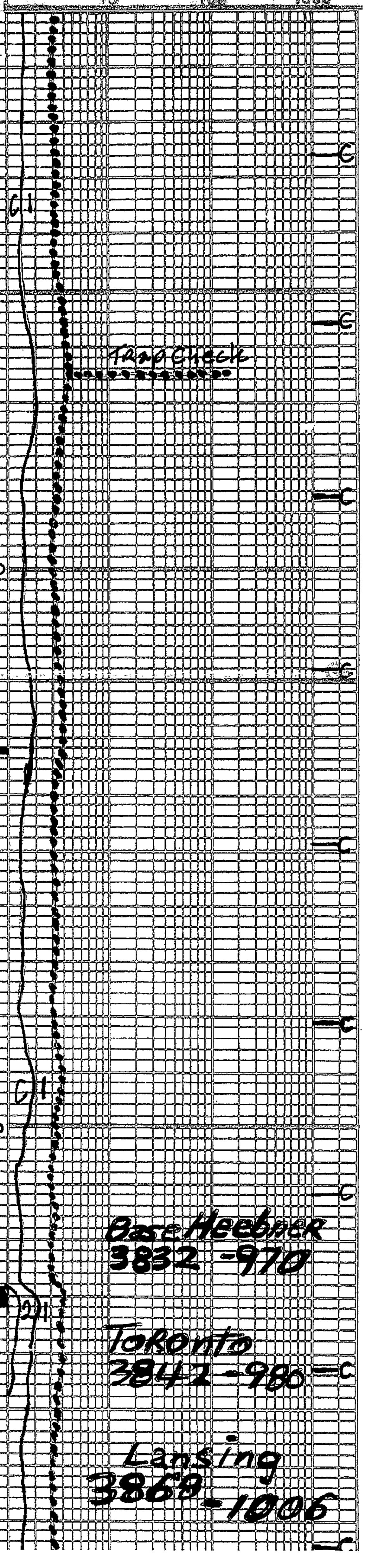
3800

— Sh v. drk gry to black - carb.

Sh lt. gry., greenish IP's to lt. green soft & mushy when wet

Lms. lt. gry., tanish IP's; crypto xln.; sub chlk and/or shly to packstn; No fluor; No Cut No Vis Por w/ trs. Lms w/ trs wht. to crm-chlk & crm to tan; crypto. to v.v. fn xln.; trs sub-chlk; sub-sucro to sucro & trs packstn; phantom oolitic IP's dul lt to lt. yel. fluor; No Cut; hvy trs pr to fr & trs gd micro-pp por & poss. interxln por IP's

3868-73 Lms trs wht to crm-chlk & lt gry to tan; crypto. to v.v. fn xln, sub-chlk, sub-sucro to sucro & trs packstn; dul lt yel fluor



No vis por w/ trs. Lms w/ trs wht. to dark Chlk + crm to Tan; CRYPTO. to v.v.fn xln.; trs sub-chlk; sub-sucro to sucro + trs packstn.; phantom oolitic IP's dul lt to lt. yel. fluor; NOCut; hvy trs PR to Fr + trs good micro-pp por + poss. INTERxln por IP's

3868-73 Lms trs wht to crm-chlk + lt gry to Tan; CRYPTO. to v.v.fn xln. sub-chlk, sub-sucro to sucro + trs packstn.; dul. lt. yel fluor IP's; trs. PR to Fr micro-p.p. + poss. interxln. por. IP's

3873-4016 Interbed. Lmst.

① Lms. abn. w/ trs to hvy trs wht to crm chlk + gry lsh. tan to tan; CRYPTO. to v.v.fn xln.; sub-chlk, sub-sucro. to sucro & packstn. + trs sub-l; th oor.; phantom oolitic IP's; dul. lt. to lt. yel. fluor; NoCut scattered trs. v. poor micro-pp por

② Lms. lt. gry grdng to tan; CRYPTO to v.v.fn xln.; sub-chlk.; sub-sucro & packstn; trs phantom oolitic; dul. yel. fluor. IP's; NoCut; No Vis Por

4016-4092 Interbed. Lmsts w/ trs Chert

① Faster Drlg. Lms. extre. abn. wht. to crm chlk + lt. gry. grdng to tan; CRYPTO. to v.v.fn xln.; sub-chlk, sub-sucro. to sucro.; trs. phantom. oolitic; dul. lt. yel. to trs lt. yel. fluor.; NoCut, hvy trs. PR. to sl. trs. Fr. micro-p.p. por + poss. interxln por. IP's

② Slower Drlg Lms.; lt. gry. grdng to tan CRYPTO. to v.v.fn. xln.; trs. sub-sucro. packstn. + trs. sub-l; th oor; dul. lt. yel. fluor. IP's; NoCut; No Vis Por

③ trs chert grys-opque

4092-4128 Interbed Lmsts w/ chert

Similar 4016-4092 w/ scattered thin Shs v. drk. gry. to black-carb.

4128-4156 Interbed Lmsts. w/ Chert

Similar 4016-4092

Lansing
3868-1096

WOB 36000
RPM 65
SPM 54
PP 900

3900

Trip Check

WOB 32000
RPM 70
SPM 54
PP 1000

4000

WOB 35000
RPM 80
SPM 54
PP 1000

4100

4128-4156 Interbed Lmsts. w/Chert
Similar 4016-4092

Lmsts similar 4168-4210

Lmsts similar #2 Discription 4016-92

Lms trs. to buy. trs. wht. to crm-chlk + grayish. tan to tan; crypto. to v.v.fn. xln.; v. to extrly oolicastic to/or sli. to v. oolitic; matrix sub-sucro. to sli. trs sucro. + pack stn; dul. yel fluor; No Cut abn. gd. to excel oolicastic por.; V. Quest. perm.

4200

4210-4221 Lmsts similar 4168-4210 w/less oolicastic + more oolitic

4221-4233 Lms. lt. gry. to tan; crypto. to v.v.fn. xln.; sub-sucro., packstn + trs sub-lithogr.; dul. yel. fluor. IP's; No Cut No Vis. por.

Sh. v. drk. gry. to black-carb

Lms similar 4221-4233

4242-4250 Lms. buy trs to abn wht to crm.-chlk + lt. gry. to tan; crypto to v.v.fn xln v. to extrly oolicastic to/or sli. to v. oolitic, matrix sub-sucro to trs sucro + packstn; dul. gld to gld-yel. fluor; No Cut; extk. abn. fr, gd to excel. oolicastic por; V. Quest Perm

4250-4271 Lms. lt. to med. gry; crypto to v.v.fn. xln.; trs. sub-chlk, sub-sucro. packstn. to sub-lithogr.; dul. yel. fluor No Cut; No Vis. por.

Sh v. drk. gry. to black-carb.

4274-4312 Lmst similar 4250-4271 w/trs. to abn. wht. to crm.-chlk IP's and scattered trs. Chert gry.-opq.

4300

Sh. v. drk. gry. to black-carb.

4312-4358 Lms. lt. gry. grdng to tan; crypto. to v.v.fn. xln.; trs. sub-chlk., sub-sucro., packstn. to sub-lithogr scattered trs. sli. oolicast dul. yel. fluor.; No Cut; trs. poor oolicastic v.v. Quest. perm.

4358-4379 Lms. lt. to med. gry. — v. Shly. IP's grdng. to calc. Shs. & Shs.; med. to drk. gry. - greenish IP's crypto. xln.; sub-chlk to/or Shly to packstn.; No Cut; No Vis Por

4379-4426 Lms. w/ scattered trs. wht. to crm. - chlk + lt. gry. grdng to tan; crypto. to v.v.fn xln.; sub-chlk, sub-sucro. + packstn.; sli to v. oolitic IP's; (tan + gry) dul. yel. fluor; No Cut

4400

No. Vis Porosity

4426-4429 Lms. tan to drk tan

Kansas City
4237-1375
Blk Sh 17u

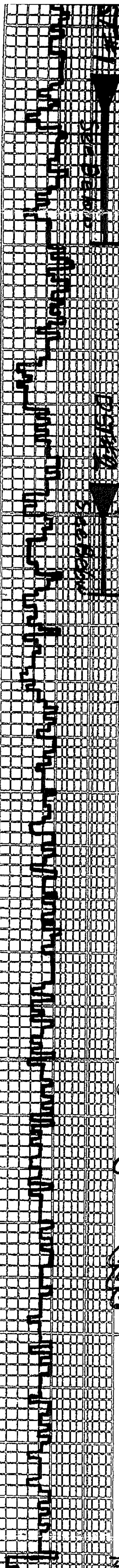
Blk Sh 17u

15u ?

18u

BKC
4358-4376

Marmaton
4379-1517



4426-4429 Lms. tan to drk tan to lt. brn from sptd. to even oil stn, v.v.fn. xln w/rexlzed crypto xln globs → phantom oolitic IP's; sub-sucro to v. sucro.; dul. gldn. to gldn. yel. fluor. w/ flush to gd. strmng. cuts zbn. pr., fr., gd. to trs. excel. micro-pp to inter xln. por

4429-4465 Lmst. similar 4376-4426

—Sh. v drk gry to black-carb.
4467-73 Lmst. similar 4376-4426
4473-4480 Lms wht to crm-chlk crypto. xln.; chlk to sub-chlk; dul. yel. fluor. No cut; No Vis Por w/ lt. tan, crypto to v.v.fn xln.; oolitic; matrix sub-chlk, sub-sucro.; dul. yel. fluor.; No cut No Vis Por

—Sh. v drk gry to black-carb
Lms. trs. wht. to crm-chlk & lt gry to tan, crypto to v.v.fn xln; sub-chlk, sub sucro & packstn; dul yel. fluor IP's; No Cut. No Vis Por.

A
B
C
D

A. 4505-4511 Lms. trs. wht. to crm-chlk & tan, gryish IP's w/ drk. tan to lt. brn., even to sptd oil stn., faint oil odor; oolitic & or sli oolicastic IP's; matrix trs sub-chlk, sub-sucro to v. sucro. & trs packstn; dul gldn to gldn. yel. fluor w/ flush to gd strmng. cuts; zbn. pr., hvy trs fr to gd. & trs excel. oolicastic, pp, micro-pp & inter xln por.

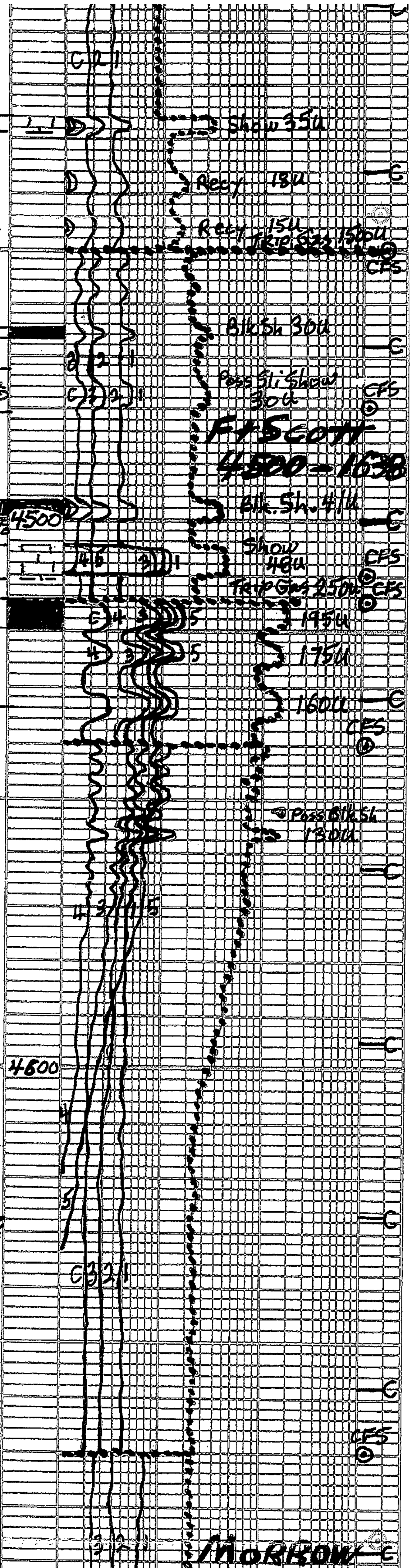
B. 4511-4515 Lms. similar 4500-4505

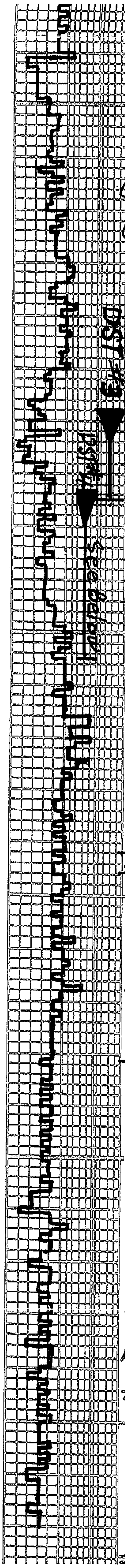
C. 4515-20 Sh. v drk gry to blk-carb.
D. 4520-4534 Lms. gryish tan to tan; crypto. to v.v.fn xln. sub-chlk, sub-sucro & packstn; trs oolitic-mostly gry w/ trs tan; v. dul. yel. fluor IP's; No cut No Vis Por

4534-4691 Interbed. Lmsts & Shs

1. Lms. lt. to med. gry.-sli to v. Shly.; crypto. xln.; sub-chlky &/or shly., packstn. & sub-lithogr.; No fluor No Cut; No Vis Por.
2. Lms. gryish. tan to tan; crypto. to v.v.fn. xln.; sub-sucro, packstn. & sub-lithogr.; scattered trs phantom oolitic; dul. lt. yel. fluor IP's; No Cut; No Vis Por
3. Trs. Chert gry-opque
4. Sh. med to v. drk. gry - calc. IP's
5. Sh. v. drk. gry. to black-carb-looking

4691-4756 Interbed. Shs, Qtz. Sd. Siltstns & Lmst.
1. Lms. lt. to med. gry.-sli to extrmly Shly grdng to calc. Shs. & gryish tan, tan, drk tan to lt. brn.; crypto to v.v.fn. xln.; sub-chlk





4691-4756 Interbed. Shs. Qtz. Sd. Siltstns & Lmst.
(1.) Lms. lt. to med. gry. - sl. to extrly Shly grdng to calc Shs. & grayish tan, tan, drk tan to lt. brn.; crypto to v.v. fn. xln.; sub-chlk &/or Shly.; sub-sucro, packstn, to trs sub-lithogr.; dul. yel. to trs. yel. fluor. No cut; No Vis Por
(2.) Sh. med to v. drk gry. - sl. to extrly calc IP's and/or sl. to extrly Silty IP's
(3) Siltstn lt. to med. gry., mostly Sh. filled & sl. to trs. brn from oil stn.; dul gldn to gldn yel. fluor w/ flush to gd strmng. cuts No Vis Por prob. laminations &/or v.v. thin beds Show all in Top 30 feet of zone
(4) Sl. to trs. Qtz Sdst. lt. gray to whitish gry. v.v. fn. gr. - ang. - prly sorted, silt & clay filled w/ trs in top 30 ft of zn. brn. from oil stn - v.v. fn. gr. ang.; silt filled; dul gldn to gldn yel. fluor w/ cut No Vis Por

4756-68 Qtz. Sdst lt. gry. to abn lt. tan from oil stn; v. fn to fn. gr.; ang to sub-ang IP's; poor sort.; abn sl. to extrly w/ finely disseminated pyr. to trs w/ pyrite matrix; dul. gldn to gldn. yel. fluor. w/ flush to gd strmng cuts; abn. pr

E to trs gd micro-pp to intergr. por.; extr. abn. of sm. clusters and loose Qtz grs.

F E 4768-4786 Interbed &/or Gradational

G Shs. Lmsts & Qtz Sdsts

(1.) Sh med to drk gry. - sl. to extrly silty IP's grdng to Sh. filled siltstns
2. Lms similar #1 description 4691-4756
3. Laminations &/or v. thin beds or cavings Qtz Sdst similar 4756-68 trs. w/ brn. oil stn, fluor, cut w/ v. sl. to trs w/ v. pr. micro-pp & pos intergr. por.

H F. 4786-4790 Lms. hvy trs. wht to crm-chlk w/ wht chlk oolites IP's & lt. gry to tan w/ sptd to even brn oil stn IP's; fnt to gd oil oder; v. to extrly oolitic (med to lg. & sm) matrix sub sucro to sucrose/trs sub-chlk & trs packstn; hvy trs finely disseminated pyr. IP's dul. gldn to gldn yel. fluor. w/ flush to excel. strmng

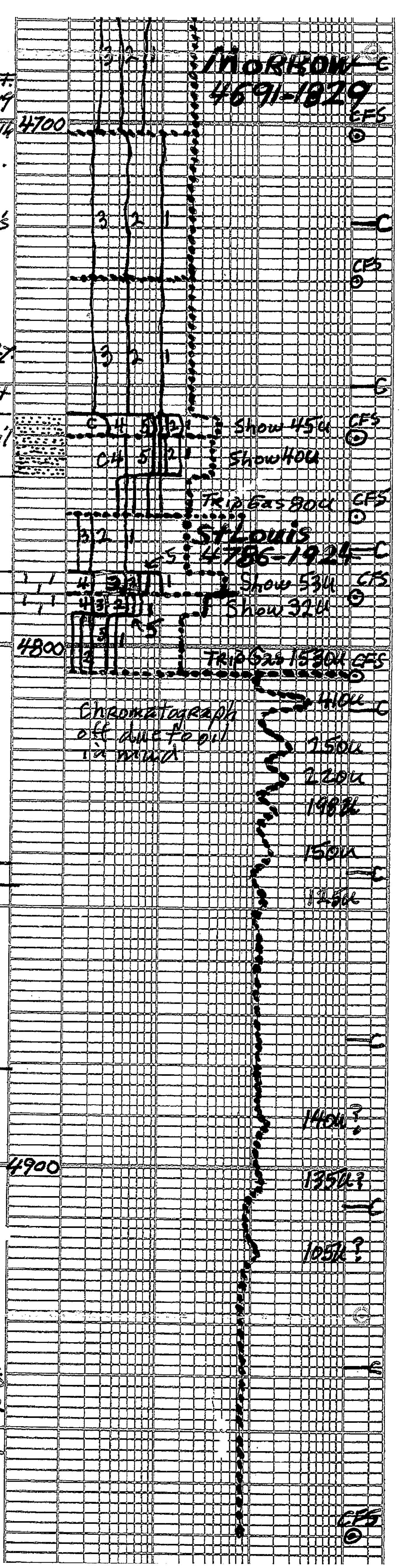
I cuts; abn. ex. gd to excel. micro-pp to interxln por; extr. abn loose oolites; v. abn. chert tan to orange opaque to transl

J G. Lms similar 4786-90 w/ incr. in chlk w/ chlk oolites, matrix trs chlk to trs sub-chlk; fnt oil oder; stn, fluor & cut; por. pr. fnt to trs gd. micro-pp to interxln por abn. loose oolites w/ hvy trs chert gry., tan to sl. trs orang, opque to trans

H. 4794-4842 Lms trs wht to crm-chlk w/ chlk oolites IP's & tan, grayish IP's; crypto. to v.v. fn. xln v. to extrly oolitic (sm, med to lg.) matrix chlk, sub-chlk, sub-sucro & packstn; dul. lt. to lt. yel. fluor No cut; No Vis Por w/ trs chert tan opq.
I. Lmy Dolo to Dolo Lm lt. gry; crypto to v.v. fn. xln sub-sucro & packstn dul yel. fluor; No cut; No Vis Por
J. 4846-4881 Lms trs sl. to v. dolo; crypto to v.v. fn. xln. tan, grayish IP's; packstn. to sub-lithogr w/ trs. sub-sucro.; v. dul. yel. fluor; No Cut; No Vis Por
4881-4970 Lms. abn sl. to trs extrly dolo. IP's; tan, grayish IP's; crypto to v.v. fn. xln.; packstn to sub-lithogr w/ trs. IP's sub-chlk & sub-sucro v. dul. yel. fluor; No Cut; No Vis Por

TD 4970

7 7/8 inch Bit Info:



TD 4970

7 7/8 inch Bit Info:
#1 Smith FH i 23 YVPS
in 1756 out 4970 TD

Cir. Points

1. 4251	6. 4540	11. 4775
2. 4450	7. 4570	12. 4790
3. 4480	8. 4700	13. 4805
4. 4510	9. 4730	14. 4970 TD
5. 4515	10. 4760	

Dev. Surv:

1. 508 3/4°	5. 4450 3/4°	
2. 1158 ?°	6. 4775 1/2°	
3. 1156 MR?°	7. 4970 ?°	TD
4. 2053 1/4°		

Daily Drlg. Progress:

1. 3600	3:50 PM	2-2-15
2. 4001	7:00 AM	2-3-15
3. 4440	7:00 AM	2-4-15
4. 4450	7:00 AM	2-5-15
5. 4515	7:00 AM	2-6-15
6. 4630	7:00 AM	2-7-15
7. 4775	7:00 AM	2-8-15
8. 4805	7:00 AM	2-9-15
9. 4854	7:00 AM	2-10-15
10. 4970	7:00 AM	2-11-15

DST #1 Marmaton 4419-4450
1st op GSB BOB 17 Min No BB
2nd op SSB Built to 9 inches No BB
Rec 135 ft Total Fluid + 485' GIP
5' Clean Oil 100% oil
130' HOCM 40% oil 60% Mud
Gravity 29.5 @ 60° Max Temp 110°F
Tool Sample 80% oil / 20% Mud
IHP 2199# FFP 48-62 in 60 min
IFP 20-42# in 30 min FSIP 226# in 120 min
ISIP 276# in 60 min FHP 2178

DST #2 Ft Scott 4495-4515
IO WSB Built to 5½" No BB
FO WSB Built to 9" 1 inch BB
Rec 332' Total Fluid 758' GIP
89' Clean oil 100% oil
177 OCGWM 20%G 45% oil 8%W 27% Mud
66' GDCWM 26%G 26% O 18%W 30% Mud
chl 32000 ppm Pit Chl 25500 ppm Max T. 111°F
Rw .27 @ 70°F pH 7.0
Tool Samp 2%G 8% O 80%W + 10% Mud
IHP 2057# FFP 62-103# in 60 min
IFP 15-54# in 30 min FSIP 600# in 120 min
ISIP 594# in 60 min FHP 2011

DST #3 MORROW Sd 4758-4775
IO WSB Built to 1⅛" No BB
FO No Blow No BB
Rec 45' Total Fluid Max Temp 114°F
45' GWM 2%G-46%W-52% Mud
chl 32000 ppm Pit Chl 2000 ppm
Rw .30 @ 72° pH 7.0
Tool Samp 2%G-43%W-55% Mud
IHP 2114# FFP 34-45 in 30 min
IFP 12-29# in 30 min FSIP 524# in 120 min
ISIP 540# in 60 min FHP 2207#

DST #4 St. Louis 4773-4805
IO SSB BOB ½ min 8" BB
FO SSB BOB 7 min 6" BB
Rec 541' Total Fluid 1299' GIP
253' GO 4% Gas 96% oil
288' WMGO 15%G-66%O-42%W-15%M
Grav 29.4 @ 60°
Tool Samp Mostly Gas + Some Muddy Oil
IHP 2254# FFP 196-253# in 60 min
IFP 50-192# in 30 min FSIP 310# in 120 min
ISIP 311# in 60 min FHP 2239# in 120 min

M. d T.D.

Tool Samp 2%G 80%O 80%W + 10% Mud
IHP 2057# FFP 62-103# in 60 min
IFP 15-54# in 30 min FSIP 600# in 120 min
ISIP 594# in 60 min FHP 2011

DST #3 MORROW Sd 4758-4775
IO WSB Built to 1⅛" No BB
FO No Blow No BB
Rec 45' Total Fluid Max Temp 114° F
45' GWM 2%G-46%W-52% Mud
Chl 32000ppm Pit Chl 2000 ppm
Rw - 30 @ 72° pH 7.0
Tool Samp 2%G-43%W-55% Mud
IHP 2114# FFP 34-45# in 30 min
IFP 12-29# in 30 min FSIP 524# in 120 min
ISIP 540# in 60 min FHP 2207#

DST #4 St. Louis 4773-4805
IO SSB BOB 7½ min 8" BB
FO SSB BOB 7 min 6" BB
Rec 541' Total Fluid 1299' GIP
253' GO 4%Gas 96%Oil
288' WMGO 15%G-66%O-4%W-15%M
GRAV 29.4 @ 60°
Tool Samp Mostly Gas & Some Muddy Oil
IHP 2254# FFP 196-253# in 60 min
IFP 50-192# in 30 min FSIP 310# in 120 min
ISIP 311# in 60 min FHP 2239#

Mud Info:

Date	2-2 10:45A	2-3 11:20P	2-4 1:10P	2-5 12:20P	2-6 7:45A	2-7 8:20A	2-8 8:10A	2-9 9:00A	2-10 12:16P
Depth	3471	4138	4450	4450	4515	4647	4775	4805	~~4938~~
Wt.	8.6	9.25	9.35	9.4	9.2	9.1	9.2	9.2	~~9.25~~
Vis	60	45	50	49	64	49	52	52	~~51~~
PV	18	13	15	17	18	15	16	17	~~16~~
YP	20	13	16	17	22	17	18	19	~~16~~
GS	16/47	13/29	15/44	16/39	15/45	13/35	14/39	15/41	~~17/45~~
WL	9.6	8.4	7.6	6.8	6.4	7.1	7.2	7.2	~~8.8~~
Cake	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	~~1/32~~
pH	11.0	11.0	10.5	9.5	9.0	10.5	10.5	10.0	~~9.0~~
Chl	1100	2300	2600	2550	2400	2000	2100	2000	~~2100~~
Ca	20	20	20	20	40	20	40	40	~~40~~
LCM	0	2	4	2½	4	3	3	3	~~2~~

OPERATOR Berexco LLC
LEASE Walker NO. 10-20
ELEVATION 2862 KB RTD 4970
LOCATION 834' FSL & 1479' FEL
SEC 20 TWP. 23S RNG. 32W
COUNTY Finney STATE Kansas

ALLIED OIL & GAS SERVICES, LLC 064652

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley, Ks

DATE 2-11-15	SEC 20	TWP. 23	RANGE 32	CALLED OUT	ON LOCATION 2:30 pm	JOB START 2-12-15 12:00am	JOB FINISH 2:00am
LEASE Walker	WELL # 10-20	LOCATION Garden City 2N (Lowe Rd) 1W 2S N into				COUNTY Finney	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR Berexco 1
TYPE OF JOB Production 2-stage
HOLE SIZE 7 7/8 T.D. 4970
CASING SIZE 5 1/2 DEPTH 4969.57
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 43.46
CEMENT LEFT IN CSG. 43.46
PERFS.
DISPLACEMENT 119.56

OWNER Same

CEMENT

AMOUNT ORDERED 178 sks ASC 10% salt 2% gel 6# gilsonite .3% FL160 .15% Defoamer 480 sks Lite 1/4# Flo-seal

		@	
COMMON		@	
POZMIX		@	
GEL		@	
CHLORIDE		@ 23.50	
ASC	178 sks	@ [illegible]	4183.00
Lite	480 sks	@ 19.88	9542.40
		@	
FL160	81 #	@ 18.90	1530.90
Defoamer	43 #	@ 3.58	154.50
Flo-seal	121 #	@ 2.97	359.37
Kolseal	1020 #	@ .98	999.60
Material Total		@	16765.77
(7544.59 / 45%)		@	
HANDLING	786.86	@ 2.48	1877.01
MILEAGE	955.9 ton miles	@ 2.75	2628.72
		TOTAL	

EQUIPMENT

PUMP TRUCK # 431 CEMENTER LaRene Gwaltney
HELPER Wayne Mabbitt
BULK TRUCK # 891/310 DRIVER Wayne Massoltie
BULK TRUCK # 818/287 DRIVER Darren Racette

REMARKS:

pump ball through 2004
Mix 135 sks Lite, Mix 120 sks ASC
Displace with water + mud, Land plug
1800 # Float held open DV Tool 400 #
Circ. 4 hrs. Plug M.H. 15 sks Plug R.H. 30 sks
Mix 300 sks Lite, Mix 58 sks ASC
Displace with water, Land plug 2150 #
Float held. Cement did circulate

Thank you

SERVICE

DEPTH OF JOB 4969.57
PUMP TRUCK CHARGE 2765.75
EXTRA FOOTAGE @ 2406.25
MILEAGE HE/HD 30 @ 2.70 231.00
MANIFOLD @ 275.00 NC
MFCD 30 @ 4.40 [illegible]
@ 132.00

(4518.32 / 45%)

TOTAL 10,040.73

CHARGE TO: Berexco
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
DV Tool		5335.00
AFU Float Shoe	@	690.00
Latch down plug	@	660.00
(11) Centralizers	@ 62.00	682.00
(2) Baskets	@ 395.00	790.00
	@	

(3623.41 / 45%) TOTAL 8,052.00

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES 34,858.50
DISCOUNT 15,686.32 (45%) IF PAID IN 30 DAYS
19,172.17 Net.

PRINTED NAME Gilbert Davila Jr
SIGNATURE [signature]

Brd.

1-316-681-4734

ALLIED
OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 2-11-15 District Oakley KS Ticket No. 64652

Company Berexco Rig Beredco 1

Lease Walker Well No. 10-20

County Finney State KS

Location 20-23-32 Field

Garden City 2N (Lowe Rd) 1 1/2 E Winto

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐ Surface ☐ Intermediate ☐ Production ☑ Liner ☐

Size 5 1/2 Type new Weight 15.5# Collar

Top stage

Casing Depths: Top D.V. tool Bottom 3200'

Drill Pipe: Size Weight Collars

Open Hole: Size 7 7/8 T.D. 4700' ft. P.B. to ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. .0238 Lin. ft./Bbl.

Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.

Drill Pipe: Bbls/Lin. ft. Lin. ft./Bbl.

Annulus: Bbls/Lin. ft. Lin. ft./Bbl.

Bbls/Lin. ft. Lin. ft./Bbl.

Perforations: From ft. to ft. Amt.

COMPANY REPRESENTATIVE

CEMENT DATA:

Spacer Type: [illegible]

Amt. 5 bbl Sks Yield ft³/sk Density PPG

LEAD: Pump Time hrs. Type [illegible] Lite

1/4# flocel Excess

Amt. 345 Sks Yield 1.97 ft³/sk Density 12.42 PPG

TAIL: Pump Time hrs. Type ASC 10% salt

2% gel 6# gilsonite Excess

Amt. 58 Sks Yield 1.59 ft³/sk Density 14.48 PPG

WATER: Lead gals/sk Tail gals/sk Total Bbls.

566 I

Pump Trucks Used 431 - Wayne

Bulk Equip. 891/310 - [illegible] Wayne

818/287 - Darren

Float Equip: Manufacturer

Shoe: Type Depth

Float: Type Depth

Centralizers: Quantity Plugs Top Btm.

Stage Collars

Special Equip.

Disp. Fluid Type Water Amt. 76.6 Bbls. Weight PPG

Mud Type Weight PPG

CEMENTER LaRue

TIME (AM/PM)	PRESSURES PSI: DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA: TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
						Held Safety meeting
1:00				5.0		Start water spacer
						Plug M.H. - 15 sk
						Plug R.H. - 30 sk
						Start cement 300 sk Lite
						Weigh cement 12.4 #
						Start cement 58 sk ASC
						weigh cement 14.5 #
						stop cement Release plug
						Washup pump & lines to pit
	0			10.0		Start water Displacement
	100#			10.0		
	300#			10.0		
	500#			10.0		
	700#			10.0		
	800#			10.0		
	900#			10.0		
	1000#			6.6		Stop water
	2150'					Land plug Float held,
2:00						Cement did circulate
Thank you						Held Safety meeting

FINAL DISP. PRESS: PSI BUMP PLUG TO PSI BLEEDBACK BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 2-11-15 District Oakley, KS Ticket No. 64652
Company Berexco Rig Berexco 1
Lease Walker Well No. 20-20
County Finney State KS
Location 20-23-32 Field
Garden City 2N (Lowell Rd) 1/2 E, N into

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐ Surface ☐ Intermediate ☐ Production ☑ Liner ☐

Size 5 1/2 Type new Weight 15.5# Collar
Bottom stage

Casing Depths: Top KB Bottom 4965.57

Drill Pipe: Size Weight Collars
Open Hole: Size 7 7/8 T.D. 4990 ft. P.B. to ft.

CAPACITY FACTORS:
Casing: Bbls/Lin. ft. .0238 Lin. ft./Bbl.
Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.
Drill Pipe: Bbls/Lin. ft. Lin. ft./Bbl.
Annulus: Bbls/Lin. ft. Lin. ft./Bbl.
Bbls/Lin. ft. Lin. ft./Bbl.
Perforations: From ft. to ft. Amt.

CEMENT DATA:
Spacer Type:
Amt. Sks Yield ft³/sk Density PPG

LEAD: Pump Time hrs. Type Lite 1/4# flo seal
Excess
Amt. 135 Sks Yield 1.97 ft³/sk Density 12.42 PPG
TAIL: Pump Time hrs. Type ASC 10% salt
2% gel 6# gilsonite Excess
Amt. 120 Sks Yield 1.59 ft³/sk Density 14.48 PPG
WATER: Lead 5.61 gals/sk Tail gals/sk Total Bbls.

Pump Trucks Used 431 - Wayne
Bulk Equip. 891/910 - Wayne
818/287 - Darren

Float Equip: Manufacturer Weatherford
Shoe: Type AFU Depth
Float: Type Latch down plug Depth
Centralizers: Quantity 11 Plugs Top Btm.
Stage Collars DV tool
Special Equip. (2) baskets
Disp. Fluid Type Water/mud Amt. 117.15 Bbls. Weight PPG
Mud Type 41 / 76.15 Weight PPG

COMPANY REPRESENTATIVE
CEMENTER LaRoue

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
						Hold Safety meeting -
12:00						Pump ball through w/rig pump.
						Circ hr.
				5.0		Pump water spacer
						Start cement 135 sks Lite
						Weigh cement 12.4#
						Start cement 120 sks ASC
						Weigh cement 14.5#.
						Stop cement Release plug.
						Wash up pump + lines to pit.
	0			20		Start water displacement
	0			20		Stop water.
	200			20		Start mud Displacement
	400			10		
	700			10		
	900			10		
	1100			10		
	1200			10		
	1300			7.15		Stop mud
	1800#					Land plug Float held.
	400#					Open DV tool
1:00						Circ 4 hrs.

FINAL DISP. PRESS: PSI BUMP PLUG TO PSI BLEEDBACK BBLS. THANK YOU