



KANSAS CORPORATION COMMISSION 1086691
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 32204
Name: Redland Resources, Inc.
Address 1: 6001 NW 23RD ST
Address 2: _____
City: OKLAHOMA CITY State: OK Zip: 73127 + 1253
Contact Person: ALAN THROWER
Phone: (405) 789-7104
CONTRACTOR: License # 33132
Name: Dan D Drilling
Wellsite Geologist: MIKE POLLOK
Purchaser: HI SIERRA CRUDE MKTG/ONEOK

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SLOW
- 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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

11/15/2011 12/02/2011 04/01/2012
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 15-033-21608-01-00

Spot Description: _____

SE NE NW SW Sec. 13 Twp. 33 S. R. 17 East West

2090 Feet from North / South Line of Section

1120 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: Comanche

Lease Name: EINSEL Well #: 13-3H

Field Name: SHIMER

Producing Formation: MISSISSIPPIAN

Elevation: Ground: 1881 Kelly Bushing: 1896

Total Depth: 7490 Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 627 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: 5000 ppm Fluid volume: 150 bbls

Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: OIL PRODUCERS INC OF KANSAS

Lease Name: RICH C 9 SWD License #: 8061

Quarter SE Sec. 22 Twp. 32 S. R. 19 East West

County: COMANCHE Permit #: 28178

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

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: Deanna Garriss Date: 08/21/2012



1086691

Operator Name: Redland Resources, Inc. Lease Name: EINSEL Well #: 13-3H
 Sec. 13 Twp. 33 S. R. 17 East West County: Comanche

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 checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: COMPACT SHUTTLE ARRAY INDUCTION COMPACT SHUTTLE PHOTO DENSITY COMP NEUTRON MICRO IMAGER	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>LANSING</td> <td>4366</td> <td>-2470</td> </tr> <tr> <td>STARK SH</td> <td>4699</td> <td>-2803</td> </tr> <tr> <td>CHEROKEE</td> <td>4986</td> <td>-3090</td> </tr> <tr> <td>MISSISSIPPIAN</td> <td>5056</td> <td>-3160</td> </tr> </table>	Name	Top	Datum	LANSING	4366	-2470	STARK SH	4699	-2803	CHEROKEE	4986	-3090	MISSISSIPPIAN	5056	-3160
Name	Top	Datum														
LANSING	4366	-2470														
STARK SH	4699	-2803														
CHEROKEE	4986	-3090														
MISSISSIPPIAN	5056	-3160														

CASING RECORD <input checked="" 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
SURFACE	12.25	9.625	36	627	CLASS A	300	2%GEL, 3% CC
INTERMEDIATE	8.75	7.00	26	5525	CLASS H	300	5#KOLSEAL, .25# FLOSEAL, .5#FL16K
PRODUCTION	6.125	4.5	11.6	7490	CLASS H	200	K#KOLSEAL, .25#FLOSEAL

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 (Amount and Kind of Material Used)	Depth
2	EVERY 10' FROM 7050-7410	ACID ALL ZONES W/1443 BBLs	SAME
2	EVERY 10' FROM 6170-6470	15% HCL GELLED ACID	SAME
2	EVERY 10' FROM 5930-6130	FRAC ALL ZONES W/22,265 BBLs	SAME
2	EVERY 10' FROM 5550-5870	WTR/393,750# 20/40 SAND	SAME

TUBING RECORD:	Size: <u>2.875</u>	Set At: <u>4258</u>	Packer At: <u>N/A</u>	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>04/01/2012</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____		
Estimated Production Per 24 Hours	Oil Bbls. <u>3</u>	Gas Mcf	Water Bbls. <u>300</u>	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input checked="" type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" 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: <u>5550-7410</u>
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MAP EXPLORATION, INC.

MICHAEL ANTHONY POLLOK, PRES.

P.O. BOX 106 ■ PURCELL, OKLAHOMA 73080
OFFICE 405/527-6038 ■ HOME 405/527-5200 ■ MOBILE 405/823-4493 ■ FAX 405/527-7629
■ E-MAIL: mapexpl@aol.com

GEOLOGICAL REPORT EINSEL 13-3H NE NW SW SECTION 13 – T33S – R17W COMANCHE COUNTY, KANSAS

SUMMARY

The above captioned well was drilled to a total measured depth of 7,490 feet on December 2, 2011. Horizontal drilling services were provided by Inwell. A one-man logging unit was on location from approximately 3,800 feet to TD. The well was under the geological supervision of the undersigned from 4,200 feet to TD. At TD, Weatherford electric logs were run that consisted of a Compact Well Shuttle Induction, Compact Well Shuttle Compensated Neutron-Density and a Compact Micro-Imager. From the data collected while drilling and analyzing, potential hydrocarbon shows were encountered in the Mississippian. A production liner was set in the horizontal lateral through the Mississippian.

MISSISSIPPIAN

The top of the Mississippi was encountered at 5,387 feet (MD) and 5,056 (-3,160) feet (TVD). Seven inch intermediate pipe was set approximately 140 feet into the Mississippian at a MD of 5,525 feet. The samples in the were described as buff, tan, off-white, to cream, moderately firm, very fine to micro crystalline limestone with a trace of free glauconite and slightly shaley. Sucrosic textured dolomites were observed as well. Good inter-crystalline and some fractured porosity were seen. An abundant bright yellow fluorescence, flash cut and fair streaming cut was observed. The gas chromatograph recorded numerous gas kicks ranging from 96 units to 702 units respectively. The electric logs indicated numerous productive zones porosity in excess of 20%.

MUDLOG & ELECTRIC LOG TOPS

REDLAND
EINSEL 13-3H
NE NW SW
13-T33S-R17W

REDLAND
RODNEY 13-5
C SW NW
13-T33S-R17W

STARK SH. (Subsea)	4699 (-2803)	4750 (-2856)
CHEROKEE SH. (Subsea)	4986 (-3090)	4986 (-3092)
MISS. UNCON. (Subsea)	5056 (-3160)	5046 (-3152)

CONCLUSION

The Einsel 13-3H was drilled as a developmental well of the Mississippian. After all data was analyzed it was determined that both the Mississippian should be commercially productive. A decision was made to run pipe and attempt completion in hopes of economical oil and gas production.

Respectfully submitted,



Chase Thomas
Geo-Tech
07/10/12

ALLIED CEMENTING CO., LLC. 036564

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: LIBERAL KS

DATE <u>11-16-11</u>	SEC <u>13</u>	TWP <u>33S</u>	RANGE <u>17W</u>	CALLED OUT <u>4:30p.m.</u>	ON LOCATION <u>9:30p.m.</u>	JOB START <u>5:00AM</u>	JOB FINISH <u>5:30AM</u>
LEASE <u>EMSEL</u>		WELL # <u>13-3H</u>	LOCATION <u>Collerton Ks 25</u>	COUNTY <u>Concordia</u>	STATE <u>Ks</u>		
OLD OR NEW (Circle one)			<u>10E 25 F# Loc</u>				

CONTRACTOR David Pily OWNER SAWE

TYPE OF JOB 950-5070

HOLE SIZE 13 3/4 T.D. 640

CASING SIZE 9 5/8 DEPTH 631

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX 500# MINIMUM _____

MEAS. LINE _____ SHOE JOINT 42.25

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT 45' BBS Dam

CEMENT AMOUNT ORDERED 150 65/35 60 BBL

39cc K/FLO SEAL

150 A 39cc 24 BBL

COMMON 150 A @ 16.25 2437.50

POZMIX @ _____

GEL 35K @ 21.25 637.50

CHLORIDE PC105K @ 50.00 582.00

ASC @ _____

150 GTE @ 15.00 2250.00

@ _____

@ _____

FLO SEAL 75' B @ 2.70 262.00

@ _____

@ _____

HANDLING 316 @ 2.25 711.00

MILEAGE SK x 24.11 @ _____ 1738.00

TOTAL 7984.25

EQUIPMENT

PUMP TRUCK CEMENTER Babs / CEASAL

372 HELPER Beto

BULK TRUCK _____

DRIVER John Lemmy

BULK TRUCK _____

DRIVER _____

REMARKS:

mix 150 SX 65/35 60 + 39cc + 14# Hosed

mix 150 SX A + 39cc + 24 BBL

Stop release plug

Displacement 45'

Bump plug 100# over.

SERVICE

DEPTH OF JOB 631'

PUMP TRUCK CHARGE _____ 1123.00

EXTRA FOOTAGE 331 @ 95 314.45

MILEAGE 100 @ 7.00 700.00

MANIFOLD + Hoses @ _____ 200.00

GT Veh mil 100m @ 4.00 400.00

TOTAL 2739.45

CHARGE TO: REDLAND RES

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

97x

Baffle Plate @ _____ 112.00

Wooded Plug @ _____ 94.00

@ _____

@ _____

TOTAL 206.00

To Allied Cementing Co., 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.

PRINTED NAME Alan Watson

SIGNATURE _____

SALES TAX (if Any) _____

TOTAL CHARGES 10,929.70

DISCOUNT 2185.94 IF PAID IN 30 DAYS

\$8743.76

ALLIED CEMENTING CO., LLC. 037846

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Medicine Lodge

DATE <u>11-27-11</u>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>Enid</u>	WELL #	LOCATION <u>US 160 # ^{corrd.} 24, 15, 1w, 5Ks, E-</u>		COUNTY	STATE		
OLD OR <u>NEW</u> (Circle one)		into at Rig Sign,					

CONTRACTOR Don D. #5 OWNER Redland Res.

TYPE OF JOB <u>Production</u>	CEMENT AMOUNT ORDERED <u>300 sq class H ASC + 5# Kalsol + .8% FL-760 + 1/4" Floeal</u>
HOLE SIZE <u>8 3/4</u> T.D. <u>5525</u>	
CASING SIZE <u>7"</u> DEPTH <u>5523</u>	
TUBING SIZE DEPTH	
DRILL PIPE DEPTH	
TOOL DEPTH	
PRES. MAX <u>1700</u> MINIMUM <u>—</u>	
MEAS. LINE SHOE JOINT <u>39.53</u>	
CEMENT LEFT IN CSG. <u>40'</u>	
PERFS.	
DISPLACEMENT <u>211 Bbls Fresh H₂O</u>	

EQUIPMENT			
PUMP TRUCK CEMENTER <u>D. Felia</u>		COMMON	@
# <u>360-265</u> HELPER <u>J. Thinesch</u>		POZMIX	@
BULK TRUCK		GEL	@
# <u>421</u> DRIVER <u>E. Piper</u>		CHLORIDE	@
BULK TRUCK		ASC	@
#	DRIVER	Class H 300 sq	@ 21.95 6375.00
		Kalsol 1500 #	@ .89 1335.00
		FL-760 141 #	@ 17.20 2425.20
		Floeal 75 #	@ 2.70 202.50
			@
			@
			@
		HANDLING <u>390</u>	@ 2.25 877.50
		MILEAGE <u>390 x .11 x 35</u>	@ 1287.00
		TOTAL	<u>\$12,502.20</u>

REMARKS:
Pipe on Bottom, Break Cline, Pump 50 sq Scanner
Cement Mix 250 sq H ASC cement, Stop Pump
Wash Pump & Lines, Release Plug, Start Disp w/
Fresh H₂O, See increase in PST, Slow Rate, Slow
again, Bump Plug at 24 Bbls total Disp, At 1700'
Release PST, Floeal Did Not

CHARGE TO: Redland Resources

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE			
DEPTH OF JOB <u>5523'</u>			
PUMP TRUCK CHARGE			<u>2145.00</u>
EXTRA FOOTAGE	@		
MILEAGE	<u>00</u> @ 7.00		<u>420-</u>
MANIFOLD <u>head rental</u>	@		<u>200-</u>
<u>Light Vehicle</u>	<u>10</u> @ 4.00		<u>240-</u>
<u>Swedge rental</u>	@		<u>250-</u>
<u>Discharge over-comar</u>			
		TOTAL	<u>3805.00</u>

To Allied Cementing Co., 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.

PLUG & FLOAT EQUIPMENT			
<u>1- Sun Seal Float Shoe</u>	@		<u>169.00</u>
<u>1- Sun Seal Float Collar</u>	@		<u>758.00</u>
<u>1- TRP</u>	@		<u>85.00</u>
	@		
	@		
	@		
	@		
		TOTAL	<u>1452.00</u>

PRINTED NAME _____

SIGNATURE Phil Watson

SALES TAX (If Any) _____

TOTAL CHARGES \$17,759.20

DISCOUNT 20% IF PAID IN 30 DAYS

Net \$14,207.36

ALLIED CEMENTING CO., LLC. 037903

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Medicine Lodge, KS

DATE <u>12-3-2011</u>	SEC <u>13</u>	TWP <u>33S</u>	RANGE <u>17W</u>	CALLED OUT <u>10:00 AM</u>	ON LOCATION <u>12:30 PM</u>	JOB START <u>3:30 PM</u>	JOB FINISH <u>6:30 PM</u>
LEASE <u>Einzel</u>	WELL # <u>3-13</u>	LOCATION <u>160 + CR24, 1 South, 1 West</u>		COUNTY <u>Cornwall</u>	STATE <u>KS</u>		
OLD OR <u>NEW</u> (Circle one)		<u>5 1/2 South, east side</u>					

CONTRACTOR <u>Den D #5</u>	OWNER <u>Redlene Resources</u>
TYPE OF JOB <u>Production</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>7500'</u>
CASING SIZE <u>4 1/2"</u>	DEPTH <u>2151'</u>
TUBING SIZE	DEPTH
DRILL PIPE <u>3 1/2"</u>	DEPTH <u>536'</u>
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT <u>43'</u>
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT <u>68 bbls of Freshwater</u>	

CEMENT	AMOUNT ORDERED <u>50s x 60' 40' 40' 60'</u>
	<u>200s x Class B ASC + 5# Kalsol + 1.5% C-18 + .10% C-51 + 1/4# C-41P + 1/4# Flo Seal</u>
COMMON <u>A</u>	<u>30 sx @ 16.25 487.50</u>
POZMIX	<u>20 sx @ 8.50 170.00</u>
GEL	<u>2 sx @ 21.25 42.50</u>
CHLORIDE	@
ASC <u>H</u>	<u>200 sx @ 21.25 4250.00</u>
<u>Kalsol</u>	<u>1000# @ .89 890.00</u>
<u>Flo Seal</u>	<u>50# @ 2.70 135.00</u>
<u>C-18</u>	<u>282# @ 13.78 3885.96</u>
<u>C-51</u>	<u>18.8# @ 20.64 388.03</u>
<u>C-41P</u>	<u>50# @ 8.90 445.00</u>
<u>Stop Loss LCM</u>	<u>120# @ 2.27 272.40</u>
<u>Stop Loss Polymer</u>	<u>100# @ 11.90 1190.00</u>
HANDLING <u>318</u>	<u>@ 2.25 715.50</u>
MILEAGE <u>30 / 318 / .11</u>	<u>1049.40</u>
TOTAL <u>14,159.29</u>	

EQUIPMENT

PUMP TRUCK # <u>360-265</u>	CEMENTER <u>Derin F. [Signature]</u>
	HELPER <u>Jason T</u>
BULK TRUCK # <u>363-290</u>	DRIVER <u>Adam M.</u>
BULK TRUCK #	DRIVER <u>Cory B. Nesl R.</u>

REMARKS:
Pipe on bottom & break circulation, pump 2.8 bbls of stop loss spacer, mix 200s of cement, shut down, loss pump & lines, Release plug, start displacement, lift pressure 9 + 26 bbls, slow rate to 340 pm at 60 bbls, bump plug & 68 bbls low 1600 ps, plug & hold, mix 50s of cement for pct & make holes, Reverse out with 80 bbls plug down at 5:15 pm

CHARGE TO: Redlene Resources
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE	
DEPTH OF JOB <u>7517'</u>	
PUMP TRUCK CHARGE	<u>2695.00</u>
EXTRA FOOTAGE	@
MILEAGE <u>60</u>	<u>@ 7.00 420.00</u>
MANIFOLD	@
<u>light vehicle 60.</u>	<u>@ 4.00 240.00</u>
	@
TOTAL <u>3355.00</u>	

PLUG & FLOAT EQUIPMENT	
<u>4- spincizers</u>	<u>@ 115.36 461.44</u>
	@
	@
	@
	@
TOTAL <u>461.44</u>	

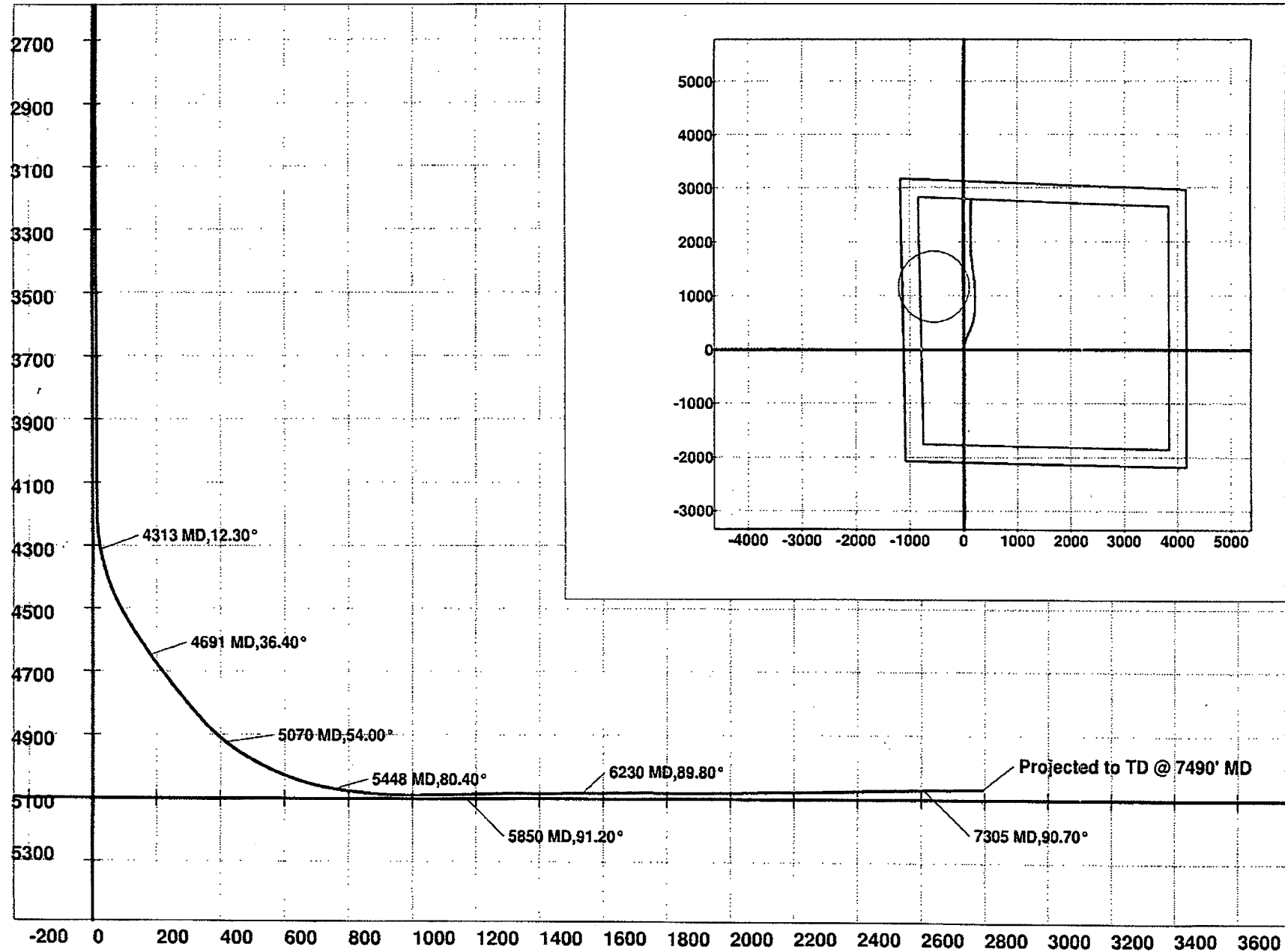
To Allied Cementing Co., LLC.
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PRINTED NAME X _____
 SIGNATURE X [Signature]

SALES TAX (If Any)	_____
TOTAL CHARGES	<u>17,975.73</u>
DISCOUNT <u>20%</u>	IF PAID IN 30 DAYS
<u>Net 14,380.58</u>	

Thank you!!!

Company: Redland Resources
Lease/Well: Einsel 13-3H
Location: Comanche County
State/Country: Kansas





Job Number: 11-223
 Company: Redland Resources
 Lease/Well: Einsel 13-3H
 Location: Comanche County
 Rig Name: Dan D # 5
 RKB:
 G.L. of M.S.L.:

State/Country: Kansas
 Declination: 5.05
 Grid: 0.32
 File name: P:\SURVEYS\REDLAND\11223.SVY
 Date/Time: 07-Dec-11 / 07:52
 Curve Name: as drilled

Inwell Inc

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Course Length FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	Grid X FT	Grid Y FT
.00	.00	.00	.00		.00	.00	.00	.00	1418477.00	501729.00
617.00	.10	217.00	617.00	617.00	-.43	-.32	-.43	.02	1418476.68	501728.57
1086.00	.60	271.50	1085.99	469.00	-.69	-3.03	-.69	.12	1418473.97	501728.31
1788.00	1.20	300.10	1787.90	702.00	3.09	-13.06	3.09	.10	1418463.94	501732.09
2704.00	.20	9.40	2703.83	916.00	9.48	-21.10	9.48	.12	1418455.90	501738.48
3492.00	.30	294.00	3491.82	788.00	11.67	-22.76	11.67	.04	1418454.24	501740.67
4123.00	.70	291.80	4122.80	631.00	13.78	-27.84	13.78	.06	1418449.16	501742.78
4155.00	.80	290.80	4154.80	32.00	13.93	-28.23	13.93	.32	1418448.77	501742.93
4186.00	.90	286.10	4185.79	31.00	14.07	-28.67	14.07	.39	1418448.33	501743.07
4218.00	2.00	12.70	4217.79	32.00	14.69	-28.79	14.69	6.70	1418448.21	501743.69

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Course Length FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	Grid X FT	Grid Y FT
4250.00	5.50	28.20	4249.71	32.00	16.58	-27.94	16.58	11.29	1418449.06	501745.58
4281.00	9.10	30.90	4280.46	31.00	20.00	-25.98	20.00	11.66	1418451.02	501749.00
4313.00	12.30	31.00	4311.90	32.00	25.09	-22.92	25.09	10.00	1418454.08	501754.09
4344.00	15.40	30.10	4341.99	31.00	31.49	-19.16	31.49	10.02	1418457.84	501760.49
4376.00	18.00	28.40	4372.64	32.00	39.51	-14.68	39.51	8.27	1418462.32	501768.51
4408.00	20.30	25.70	4402.87	32.00	48.87	-9.92	48.87	7.70	1418467.08	501777.87
4439.00	22.70	20.90	4431.71	31.00	59.30	-5.45	59.30	9.59	1418471.55	501788.30
4471.00	25.40	17.40	4460.93	32.00	71.62	-1.19	71.62	9.54	1418475.81	501800.62
4502.00	27.90	16.40	4488.64	31.00	84.93	2.84	84.93	8.19	1418479.84	501813.93
4534.00	29.90	16.80	4516.65	32.00	99.74	7.26	99.74	6.28	1418484.26	501828.74
4566.00	32.00	17.80	4544.09	32.00	115.45	12.16	115.45	6.76	1418489.16	501844.45
4597.00	34.00	19.30	4570.09	31.00	131.46	17.54	131.46	6.97	1418494.54	501860.46
4628.00	34.90	20.40	4595.65	31.00	147.95	23.49	147.95	3.53	1418500.49	501876.95
4660.00	35.00	20.40	4621.88	32.00	165.13	29.88	165.13	.31	1418506.88	501894.13
4691.00	36.40	20.90	4647.05	31.00	182.06	36.26	182.06	4.61	1418513.26	501911.06
4723.00	38.10	21.30	4672.53	32.00	200.13	43.24	200.13	5.37	1418520.24	501929.13
4754.00	39.10	21.70	4696.75	31.00	218.12	50.33	218.12	3.32	1418527.33	501947.12
4786.00	40.10	22.80	4721.41	32.00	237.00	58.05	237.00	3.82	1418535.05	501966.00
4817.00	40.30	23.00	4745.09	31.00	255.43	65.84	255.43	.77	1418542.84	501984.43
4849.00	40.80	23.20	4769.40	32.00	274.57	74.00	274.57	1.61	1418551.00	502003.57
4880.00	41.60	23.60	4792.73	31.00	293.31	82.11	293.31	2.72	1418559.11	502022.31
4912.00	42.40	23.70	4816.51	32.00	312.92	90.70	312.92	2.51	1418567.70	502041.92
4943.00	43.20	24.20	4839.25	31.00	332.17	99.25	332.17	2.80	1418576.25	502061.17
4975.00	45.60	23.90	4862.11	32.00	352.61	108.37	352.61	7.53	1418585.37	502081.61
5007.00	48.30	23.80	4883.96	32.00	374.00	117.83	374.00	8.44	1418594.83	502103.00
5038.00	51.30	23.00	4903.96	31.00	395.73	127.23	395.73	9.88	1418604.23	502124.73
5070.00	54.00	21.80	4923.38	32.00	419.25	136.91	419.25	8.95	1418613.91	502148.25
5101.00	56.10	20.60	4941.13	31.00	442.93	146.10	442.93	7.48	1418623.10	502171.93
5132.00	58.50	18.90	4957.88	31.00	467.49	154.91	467.49	9.01	1418631.91	502196.49
5163.00	60.80	17.10	4973.54	31.00	492.93	163.17	492.93	8.95	1418640.17	502221.93

	Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Course Length FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	Grid X FT	Grid Y FT
	5195.00	62.90	14.90	4988.64	32.00	520.05	170.94	520.05	8.93	1418647.94	502249.05
	5227.00	64.90	13.50	5002.72	32.00	547.90	177.98	547.90	7.38	1418654.98	502276.90
	5258.00	66.70	12.20	5015.43	31.00	575.47	184.27	575.47	6.95	1418661.27	502304.47
	5290.00	68.70	10.00	5027.57	32.00	604.52	189.97	604.52	8.92	1418666.97	502333.52
	5321.00	71.20	8.10	5038.20	31.00	633.27	194.54	633.27	9.91	1418671.54	502362.27
ENTERED MISSISSIPPIAN	5353.00	73.50	6.50	5047.90	32.00	663.52	198.41	663.52	8.62	1418675.41	502392.52
TVD-5,056' MD-5,384'	5384.00	75.90	5.30	5056.08	31.00	693.26	201.49	693.26	8.60	1418678.49	502422.26
	5416.00	78.50	3.30	5063.17	32.00	724.37	203.82	724.37	10.16	1418680.82	502453.37
	5448.00	80.40	1.90	5069.03	32.00	755.79	205.25	755.79	7.33	1418682.25	502484.79
	5475.00	82.00	.60	5073.16	27.00	782.47	205.83	782.47	7.60	1418682.83	502511.47
1 ST PERFORATION	5533.00	84.50	.40	5079.98	58.00	840.06	206.33	840.06	4.32	1418683.33	502569.06
MD-5,550'	5564.00	84.70	.50	5082.89	31.00	870.92	206.57	870.92	.72	1418683.57	502599.92
	5596.00	85.30	.00	5085.68	32.00	902.80	206.71	902.80	2.44	1418683.71	502631.80
	5627.00	87.70	.10	5087.58	31.00	933.74	206.74	933.74	7.75	1418683.74	502662.74
	5659.00	89.20	.10	5088.44	32.00	965.73	206.80	965.73	4.69	1418683.80	502694.73
	5691.00	90.00	.10	5088.66	32.00	997.73	206.85	997.73	2.50	1418683.85	502726.73
	5723.00	90.80	.20	5088.44	32.00	1029.72	206.94	1029.72	2.52	1418683.94	502758.72
	5754.00	91.10	.50	5087.93	31.00	1060.72	207.12	1060.72	1.37	1418684.12	502789.72
	5786.00	91.20	359.60	5087.29	32.00	1092.71	207.15	1092.71	2.83	1418684.15	502821.71
	5818.00	91.10	358.80	5086.64	32.00	1124.70	206.71	1124.70	2.52	1418683.71	502853.70
	5850.00	91.20	358.40	5086.00	32.00	1156.69	205.92	1156.69	1.29	1418682.92	502885.69
	5882.00	91.20	358.30	5085.33	32.00	1188.67	205.00	1188.67	.31	1418682.00	502917.67
	5913.00	91.50	358.20	5084.60	31.00	1219.64	204.06	1219.64	1.02	1418681.06	502948.64
	5945.00	91.60	358.50	5083.73	32.00	1251.62	203.14	1251.62	.99	1418680.14	502980.62
	5977.00	91.00	356.10	5083.01	32.00	1283.57	201.63	1283.57	7.73	1418678.63	503012.57
	6008.00	89.50	352.80	5082.87	31.00	1314.42	198.63	1314.42	11.69	1418675.63	503043.42
	6040.00	89.70	352.00	5083.10	32.00	1346.14	194.40	1346.14	2.58	1418671.40	503075.14
	6072.00	89.60	352.10	5083.29	32.00	1377.83	189.97	1377.83	.44	1418666.97	503106.83
	6103.00	90.10	352.10	5083.37	31.00	1408.54	185.71	1408.54	1.61	1418662.71	503137.54
	6135.00	91.00	352.60	5083.07	32.00	1440.25	181.45	1440.25	3.22	1418658.45	503169.25

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Course Length FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	Grid X FT	Grid Y FT
6166.00	91.40	352.80	5082.42	31.00	1470.99	177.51	1470.99	1.44	1418654.51	503199.99
6198.00	90.20	352.80	5081.97	32.00	1502.74	173.50	1502.74	3.75	1418650.50	503231.74
6230.00	89.80	352.90	5081.97	32.00	1534.49	169.52	1534.49	1.29	1418646.52	503263.49
6261.00	90.30	352.40	5081.94	31.00	1565.23	165.56	1565.23	2.28	1418642.56	503294.23
6356.00	90.80	355.30	5081.03	95.00	1659.67	155.38	1659.67	3.10	1418632.38	503388.67
6451.00	89.40	356.10	5080.87	95.00	1754.40	148.26	1754.40	1.70	1418625.26	503483.40
6545.00	90.10	356.80	5081.28	94.00	1848.22	142.44	1848.22	1.05	1418619.44	503577.22
6640.00	90.30	357.90	5080.94	95.00	1943.11	138.04	1943.11	1.18	1418615.04	503672.11
6735.00	90.80	359.40	5080.03	95.00	2038.08	135.81	2038.08	1.66	1418612.81	503767.08
6830.00	90.80	359.80	5078.71	95.00	2133.07	135.14	2133.07	.42	1418612.14	503862.07
6925.00	91.30	.50	5076.96	95.00	2228.05	135.39	2228.05	.91	1418612.39	503957.05
7020.00	91.50	.90	5074.64	95.00	2323.02	136.55	2323.02	.47	1418613.55	504052.02
7115.00	91.40	1.40	5072.24	95.00	2417.97	138.46	2417.97	.54	1418615.46	504146.97
7210.00	90.90	1.00	5070.33	95.00	2512.93	140.45	2512.93	.67	1418617.45	504241.93
7305.00	90.70	1.30	5069.01	95.00	2607.90	142.35	2607.90	.38	1418619.35	504336.90
7400.00	90.50	1.10	5068.01	95.00	2702.87	144.34	2702.87	.30	1418621.34	504431.87
7444.00	90.60	.90	5067.59	44.00	2746.86	145.11	2746.86	.51	1418622.11	504475.86
Projected to TD										
7490.00	90.60	.90	5067.11	46.00	2792.85	145.83	2792.85	.00	1418622.83	504521.85

LAST PERFORATION
MD-7,410'