



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1146755
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: _____



1146755

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> _____	PRODUCTION INTERVAL: _____ _____
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Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

June 11, 2013

Leon Rodak
Murfin Drilling Co., Inc.
250 N WATER STE 300
WICHITA, KS 67202-1216

Re: ACO1
API 15-153-20917-00-00
Knapp 1-30
SE/4 Sec.30-02S-36W
Rawlins County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Leon Rodak

MDCI Knapp #1-30 2570' FSL 2010'FEL Sec. 30-2S-36W 3387' KB							MDCI CWA 'B' #1-5 330' FNL 2310'FWL Sec. 5-3S-36W 3369' KB	
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	3280	+107	-34	3280	+107	-34	3228	+141
B/Anhydrite	3322	+65	-42	3316	+71	-36	3262	+107
Neva	3776	-389	-30	3775	-388	-29	3728	-359
Foraker	3900	-513	-34	3894	-507	-28	3848	-479
Topeka	4129	-742	-20	4127	-740	-19	4090	-721
Oread	4251	-864	-22	4256	-869	-27	4211	-842
Lansing	4344	-957	-28	4344	-957	-28	4298	-929
Stark	4565	-1178	-26	4570	-1183	-31	4521	-1152
BKC	4609	-1222	-23	4619	-1232	-33	4568	-1199
Pawnee	4734	-1347	-20	4754	-1367	-40	4696	-1327
Cherokee	4809	-1422	-24	4824	-1437	-39	4767	-1398
Mississippi	NR			NR			4958	-1589
RTD	4910						5100	
LTD				4911			5102	

Terry McLeod
 Consulting Geologist
 P.O. Box 503
 Wichita, Kansas 67201
 316-265-6431

GEOLOGIST'S REPORT
 DRILLING TIME AND SAMPLE LOG

OPERATOR Muehlen Dels Co, Inc
 LEASE Knapp WELL NO. L-36
 FIELD W. Locat
 LOCATION 2570' EST 1/2 2610' EEL
 SEC. 30 TWP. 2 S RGE. 36 W
 COUNTY Rawlins STATE Kansas

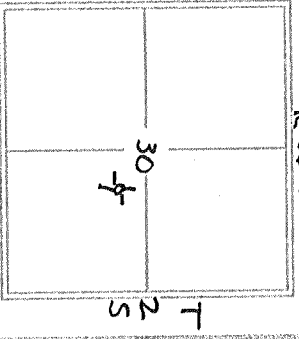
CONTRACTOR Murfin drly Co. Rig No 14
 COMM. 2-14-2013 COMP. 2-22-2013
 RTD 4910' LOG TO 4911'
 SAMPLES OVD FROM 3646' TO RTD
 DRILLING TIME KEPT FROM 3600' TO RTD
 SAMPLES OBTAINED FROM 3646' TO RTD
 GEOLOGICAL SUPERVISION FROM 3550' TO RTD
 MUD UP 3400'-3600' TYPE MUD Chemical

FORMATION	TOP	LOG	DATA	SAMPLE	DATA	STRUCT. COMP.
Dohy drly Co	3280		+161			-34
Base Anhyd	3316		+11	N/A		-36
Neva	3715		-388	3716	-389	-29
Forker	3894		-507	3900	-513	-28
Topoka	4121		-740	4129	-742	-19
Lansing	4344		-957	4345	-958	-28
B/KC	4619		-1232	4622	-1235	-33
Raunee	4754		-1367	4755	-1368	-40
Cher Sh.	4824		-1437	4828	-1441	-39
Morrow sh	4860		-1473	4864	-1477	-37

ELEVATION
 KB 3587'
 DF _____
 CL 3377'
 Measurements Are All From K.B

CASING RECORD
 SURFACE 85/8 @ 395'
 w/ 3 50 5x
 PRODUCTION None

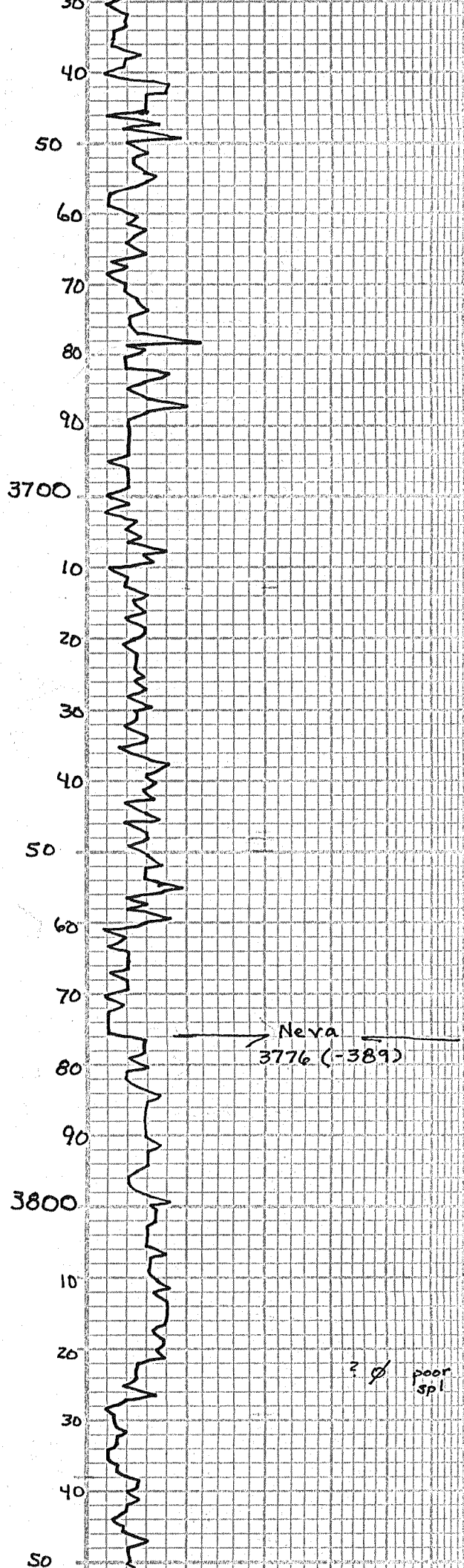
ELECTRICAL SURVEYS
 Pioneer Energy Serv
 Dual Induction
 Dse - Neutron
 Sonic + Microlog



LOG	DEPTH	NO	SEC	LINE	TYPE	DEPTH OF
2-14-13	miet	A	12 1/4	HTC	RE	397
2-15-13	397' Surf Gg	1	7 1/8	HTC	Gy 20c	4910
2-16-13	1940'					
2-17-13	3090' Lot 1)					
2-18-13	3775' drly 2)					
2-19-13	4270' drly 3)					
2-20-13	4616' drly 4)					
2-21-13	4910' RTD # 5)					
2-22-13	4910' E-log plug 6)					

FORMATION Raunee DEPTH 4742-60 DESCRIPTION OF LOG
 Limestone, Cream - tan, fine xln
 foss - w/ 3-4 pieces w/ med. brown stain
 f STD in poor foss ph. Very St. odor

REFERENCE WELL FOR STRUCTURAL COMPARISON MDC Inc Cu A-B 1-5-330' ENC
4 2316' FWL Sec. 5 -35-36 W, 3369' KB



Ls. lt tan. Gry. Arg. tight
NVØ. N.S.

red shales predominate

Ls. q/a + lots of shale.

3700

Ls. lt tan-Gry. dse, NVØ
N.S.

sh. red - bleeding - gry

sh. red - gry

tr ls.

sh. drk gry - + rd sh.

rd sh. bleeding

Ls. lt tan. fn. xln + foss,
w/ scatt Ø N.S. Chky

Neva
3776 (-389)

Ls. lt tan. fn. xln + foss
w/ scatt Ø. N.S. Chky

3800

Ls. lt tan. fn. xln. v. sh. ly

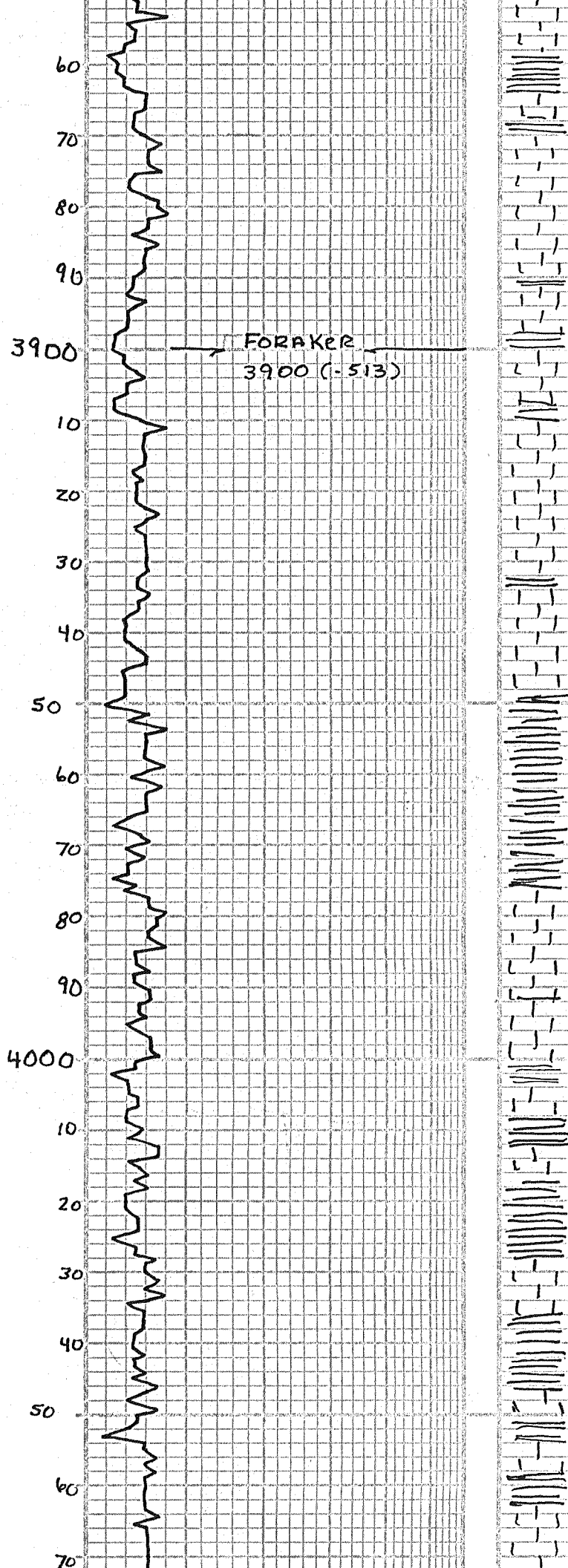
Ls. q/a - sh. red.

sh. red

? Ø poor spl

Ls. lt tan. fn. xln. sl.
foss. N.S.

50



Ls. lt tan. fn. xln. st foss
scat \emptyset N.S. SHLY

Ls. lt tan. fn. xln. arg
pr. \emptyset N.V \emptyset , N.S. SHLY

Ls. lt tan. fn. xln. tight
chky. N.S. SHLY

Ls. tan. fn. xln. foss
pr. \emptyset N.S.

sh. + ls. tan. fn. xln. foss
pr. \emptyset N.S.

Ls. lt tan. fn. xln. + slt
foss - dse, N.S.

Ls. tan. gry. dse, NV \emptyset N.S.

Ls. brn. dse, NV \emptyset N.S.
inc in sh.

sh. gry. mar. red -

fr. ls. N.S.

sh. gry. rd. mar

ls. Crm. fn. xln. slt ool.
2 pcs dead asp - stn -
no live ool.

ls. tan. brn. dse, NV \emptyset
N.S.

Ls. lt. tan. fn. xln. slt foss
- N.S.

sh. mar. dx. gry.

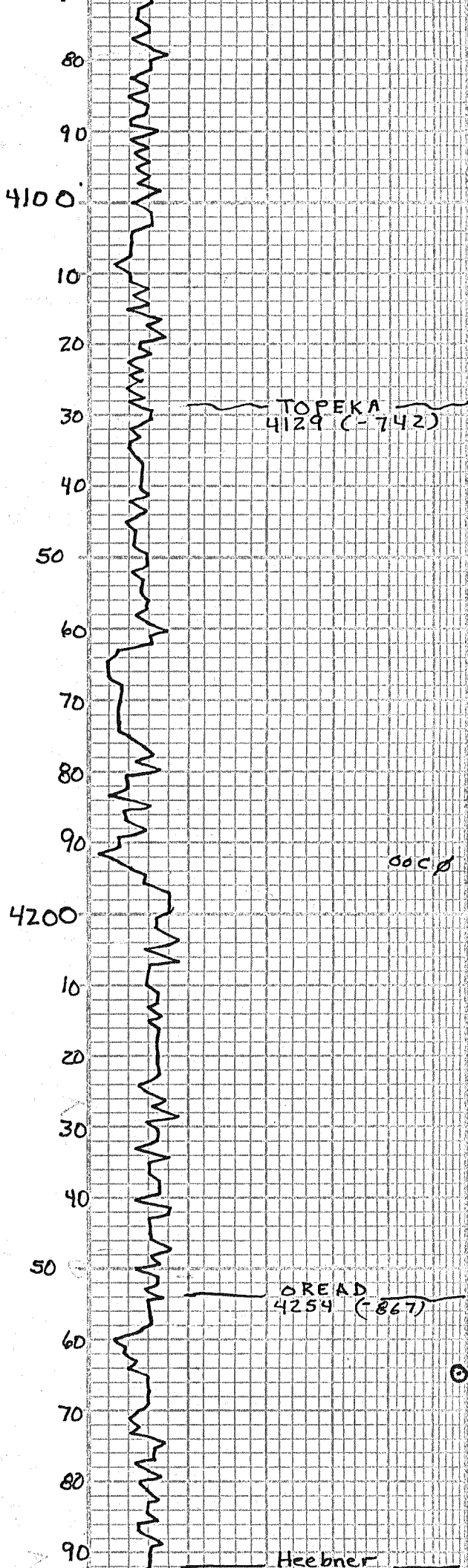
Ls. lt tan. gry. fn. xln.
tight. N.S.

Ls. lt tan. gry, NV \emptyset N.S.

Ls. gla, N.S. tight Rx
sh - varicolored

sh. varicolored

Ls. lt tan. fn. xln. foss
mostly tight - N.S.



Ls. lt tan, fn-xln, foss, N.S.

sh. varicolor

Ls. Crm-lt tan, fn-xln+foss
N.S. CHKY.

sh. varicolored

Ls. lt tan-Gry, fn-xln-
foss. fr-pr. Ø. SLI CHKY
N.S.

sh. gry-red

Ls. lt tan-lt Gry, fn-xln
SLI FOSS. N.S. CHKY

Ls. Crm-lt Gry, fn-xln
SLI FOSS - N.S. CHKY

sh. gry-red

sh. gry-red.

sh. gry-rd - Grn - siltstone

Ls. Crm. fn-xln - ooc w/
fair small ooc Ø. N.S.

Ls. lt tan-lt Gry, dse,
NVØ. N.S.

Ls. lt Gry - dse, NVØ N.S.

Ls. lt Gry - dse, NVØ N.S.

sh. med-drk Gry + dse ls
N.S.

sh. drk-med Gry

Ls. lt tan, fn-xln, N.S.

Ls. Crm, fn-xln, foss
w/ 3-4 pe's w/ drk blk
asph f (ky str). NFO
No odor

Ls. tan, dse, NVØ
N.S.

Ls gla - shly

4292 (-905)

4300

10

20

30

40

50

60

70

80

90

4400

10

20

30

40

50

60

70

80

90

4500

10

LANSING
4345 (-958)



sh. blk Carb.

ls. brn, dse, NVØ N.S.

sh. varicolored

sh. mar-gry

sh. gry + mar

ls. tan. fn-xln v. slt foss
3 pcs w/ blk asph. str
-flakey, MFD, NO odor

ls. lt. tan - tan slt foss -
2 pcs w/ dead oil str. pr.Ø
N.S.

ls. tan. fn-xln. tight
N.S.

ls. tan. fn-xln. tight
NVØ N.S.

ls. Crm-Gry, fn-xln -
tight - N.S.

SILTSTONE - CR - tight
NVØ - N.S.

sh. varicolored
fr ls. - dse, NVØ N.S.

SH. GRAY-MAR.

ls. lt. tan-Gry, fn-xln-dse
V-SLT FOSS. NVØ-PR Ø. N.S.
V-SLT CHKY.

ls. Crm - lt. Gry, fn-xln - slt
foss-dse, chky, N.S.

sh. Gry-blk-mar

ls. tan-Gry, fn-xln. tight N.S.

sh. mar-Gry.

ls. tan-Gry, fn-xln - slt foss
scatt Ø., N.S., CHKY.

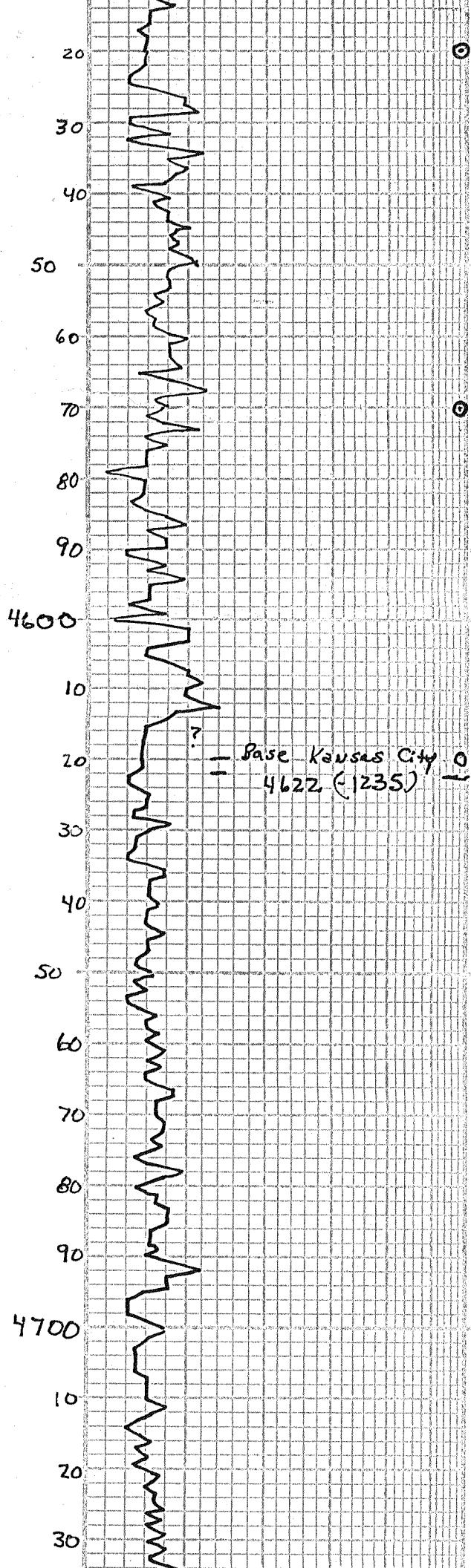
ls. Crm-Gry, fn-xln - foss
scatt Ø., N.S., CHKY

ls. Crm. Fn-xln - SLT FOSS
tr Ø. N.S. SLT CHKY

SH - BLK Carb.

sh. gry - drk Gry

ls. Crm - lt. tan. fn-xln
SLT - FOSS, pr scatt Ø.



N.S. CHKY.

sh. Gry-mar

Ls. H tan, fn-xln-dse
NVØ - V. chky.

Ls. Crm-H tan, fn-xln
CHKY-N.S.

SH-GRY-MAR.

Ls. Crm, fn-xln, 2-3 pc's w/
d.o. sta in pr xln Ø. NFD, NO
odor - CHKY

Ls. Crm-wh, fn-xln, 3-4 pc's
w/d.o. sta in pr xln:ppØ.
NFD NO odor - chky.

SH-BIK-Carb

SH-GRY-MAR

Ls. Crm, fn-xln - sli, oil
tight, pr NVØ. N.S.

sh. Gry-mar

Ls. Crm, fn-xln, tight
NVØ. - V. CHKY. N.S.

sh. Gry-mar + ls q/a
N.S.

sh. Gry-mar

Ls. tan, + gry, fn-xln
tight, pr Ø, N.S.

sh. gr-mar

Ls. lt tan-Gry, fn-xln
NVØ. N.S.

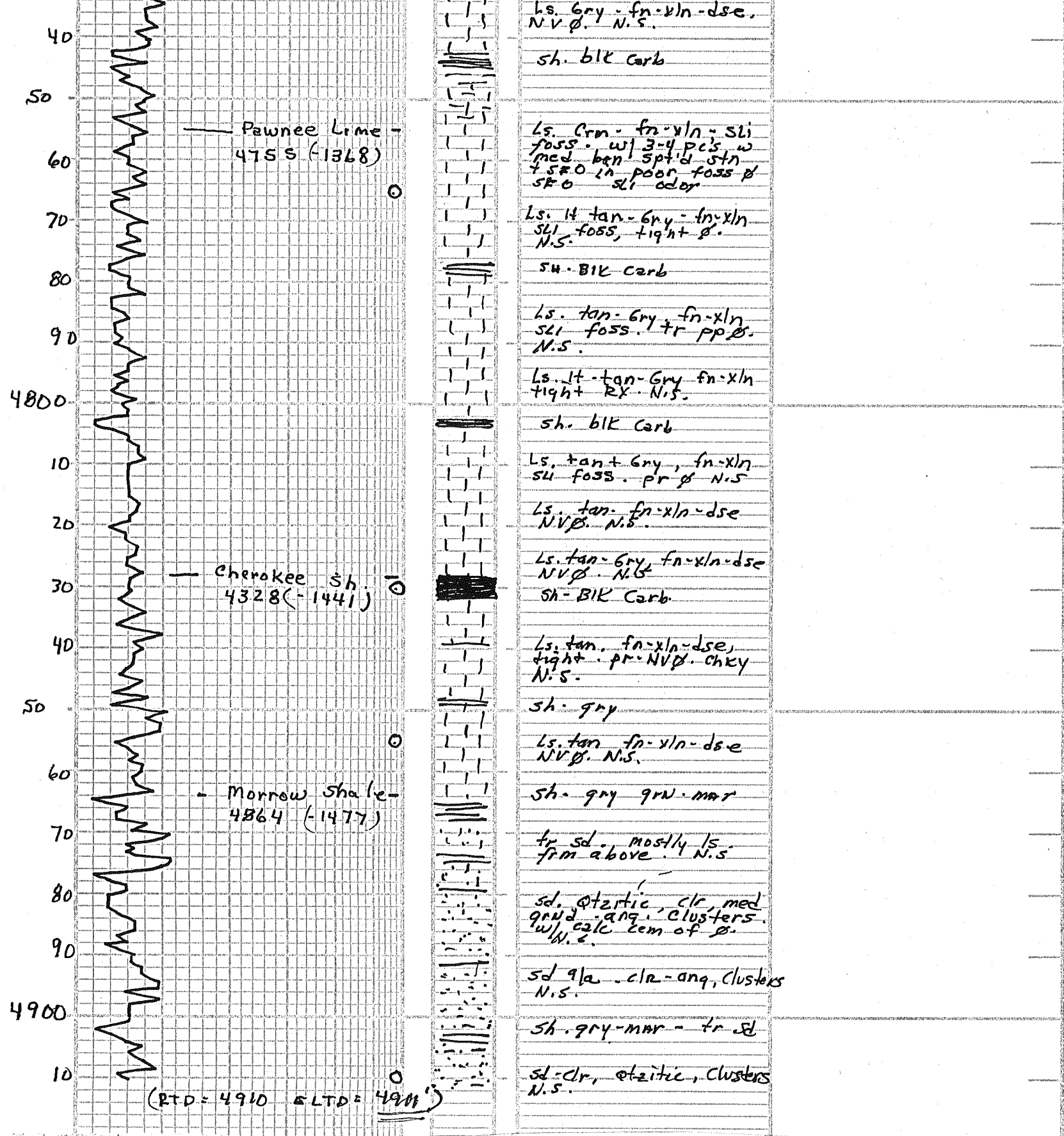
sh. gry-mar + Ls.
lt tan, fn-xln - N.S.

sh. gry-mar

sh q/a

Ls. H tan-Gry, fn-xln
tight. N.S. SHLY

Ls q/a N.S. shly.



DEPTH	DRILLING TIME Minutes/Foot	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS
	5" 10" 15" 20" 25"			
	Rate of Penetration Increases			

COMPANY MURFIN DRILLING CO INC
 LEASE Knapp 1-30 ELEVATION: 3387' KB

2010 FEB
LOCATION 2570' E SL + SEC _____ TWP _____ RNG _____
COUNTY Rawlins STATE Ks. 30 25 36 W



acct.
Prod.-Liz H

PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

OPERATOR PAY MDC
LEASE: Knapp 1-30
BM

INVOICE

Invoice Number: 134895
Invoice Date: Feb 15, 2013
Page: 1

Bill To:

** Murfin Drlg. Co., Inc.
250 N. Water
STE #300
Wichita, KS 67202

Now Includes:



Customer ID	Field Ticket #	Payment Terms	
Murfin	60126	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Feb 15, 2013	3/17/13

Quantity	Item	Description	Unit Price	Amount
350.00	MAT	Knapp #1-30		
		Class A Common	17.90	6,265.00
12.00	MAT	Chloride	64.00	768.00
367.50	SER	Cubic Feet	2.48	911.40
1,355.51	SER	Ton Mileage	2.60	3,524.35
1.00	SER	Surface	1,512.25	1,512.25
80.00	SER	Pump Truck Mileage	7.70	616.00
1.00	SER	Manifold Rental	275.00	275.00
80.00	SER	Light Vehicle Mileage	4.40	352.00
1.00	EQP	8.5/8 Wooden Plug	107.46	107.46
1.00	CEMENTER	Alan Ryan		
1.00	EQUIP OPER	Wayne McGhghy		
1.00	OPER ASSIST	Darrin Hoeb		

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 5,016.01

ONLY IF PAID ON OR BEFORE
Mar 12, 2013

Subtotal	14,331.46
Sales Tax	574.81
Total Invoice Amount	14,906.27
Payment/Credit Applied	
TOTAL	14,906.27

Product →



acct.
Prod - LIZH

PROD COPY

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 134962

Invoice Date: Feb 22, 2013

Voice: (817) 546-7282
Fax: (817) 246-3361

Page: 1

Bill To:
Murfin Drlg. Co., Inc. 250 N. Water STE #300 Wichita, KS 67202

Now Includes:



Customer ID	Field Ticket #	Payment Terms	
Murfin	60118	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Feb 22, 2013	3/24/13

Quantity	Item	Description	Unit Price	Amount
132.00	MAT	Knapp #1-30		
		Class A Common	17.90	2,362.80
88.00	MAT	Pozmix	9.35	822.80
7.00	MAT	Gel	23.40	163.80
55.00	MAT	Flo Seal	2.97	163.35
236.27	SER	Cubic Feet	2.48	585.94
788.80	SER	Ton Mileage	2.60	2,050.88
1.00	SER	Plug to Abandon	2,600.47	2,600.47
80.00	SER	Pump Truck Mileage	7.70	616.00
80.00	SER	Light Vehicle Mileage	4.40	352.00
1.00	EQP	8.5/8 Dry Hole Plug	107.64	107.64
1.00	CEMENTER	Andrew Forslund		
1.00	EQUIP OPER	Dane Retzloff		
1.00	OPER ASSIST	Darrin Hoeb		

Account	Unit	W	No.	Amount	Description
10203				6489.89	PTA #1-30
				3.4231.0001	

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 4,126.78

ONLY IF PAID ON OR BEFORE
Mar 19, 2013

Subtotal	9,825.68
Sales Tax	790.97
Total Invoice Amount	10,616.65
Payment/Credit Applied	
TOTAL	10,616.65

- 4126.78

6489.89

