



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1211509
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: _____

1211509

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> _____
---	--

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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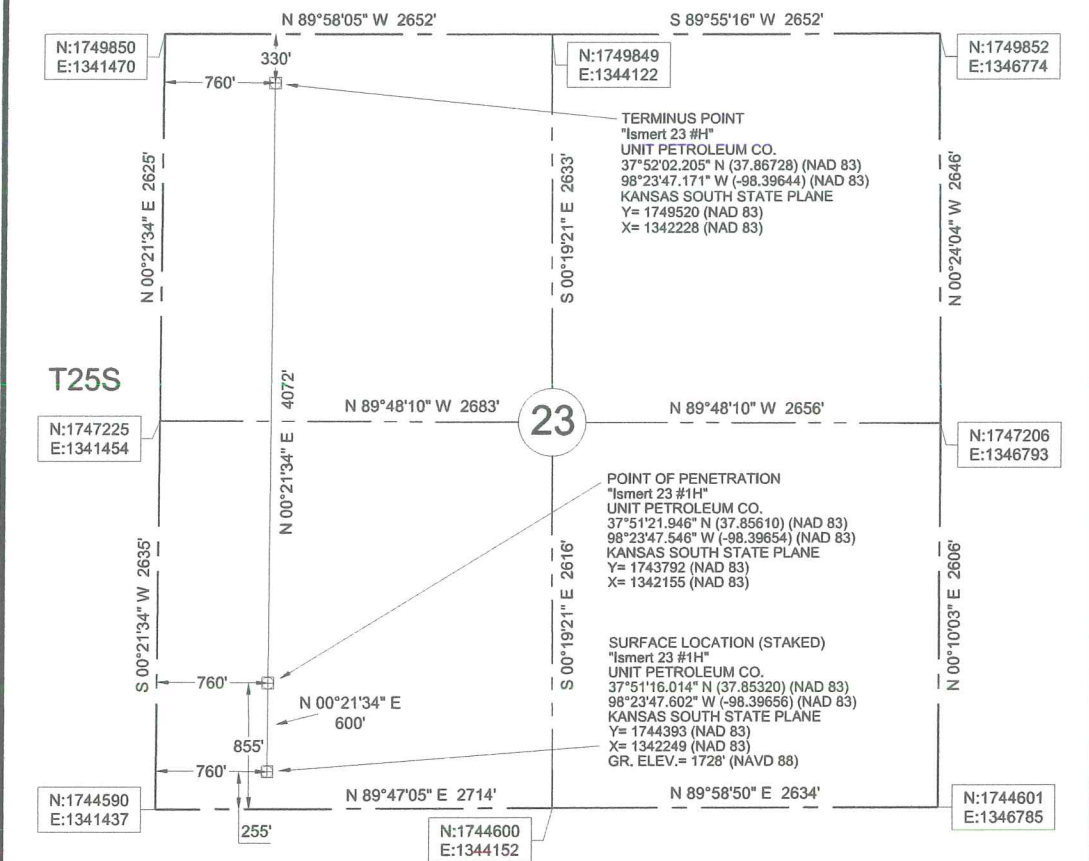
Form	ACO1 - Well Completion
Operator	Unit Petroleum Company
Well Name	Ismert 23 #1H
Doc ID	1211509

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	28	16	65	160	H	160	
Intermediate	12.25	9.625	36	1540	A	580	2% CC + 1/4# celloflake
Intermediate	8.75	7	26	4305	A	160	5% Gyp + 10% salt
Production	6.125	4.50	11.6	8830	Prem H	500	.2% SASL + 1/4# celloflake
Production	6.125	5.50	17	8830	Prem H	500	.2% SASL + 1/4# celloflake

Section 23, T 25 S, R 10 W., Reno County, Kansas.

R10W



LEGEND
 --- SECTION LINE
 - - - 1/4 SECTION LINE



Datum: NAD 83
 Units: US Survey Feet
 North: Grid
 Coordinates: State Plane
 Zone: 1502
 State: Kansas
 Region: South

Description: Surface Hole Location Stake "Ismert 23 #1H" situated 255 feet from the south section line and 760 feet from the west section line of Section 23, T 25 S, R 10 W., Reno County, Kansas.

Description: Point of Penetration "Ismert 23 #1H" situated 855 feet from the south section line and 760 feet from the west section line of Section 23, T 25 S, R 10 W., Reno County, Kansas.

Description: Terminus Point "Ismert 23 #1H" situated 330 feet from the north section line and 760 feet from the west section line of Section 23, T 25 S, R 10 W., Reno County, Kansas.



Survey is valid only if print has original seal and signature of surveyor present

**ONE CALL
KANSAS**

811

Know what's below.
Call before you dig.

Buried utilities are not necessarily shown. It is the contractor's responsibility to locate and preserve all utility services.

	JVIDENS LAND SURVEY Co., INC. 1210 19TH STREET / P.O. BOX 943 WOODWARD, OKLAHOMA 73802 <small>Phone 580-256-7174 - Fax 580-256-3424 roger@jvidenslandsurvey.com mike@jvidenslandsurvey.com</small>	Survey For: Unit Petroleum Co. P.O. Box 2726 Woodward, Oklahoma 73802 Attn: Jason Rummery	JOB 780-13	DATE OF PLAT 12-18-2013	SCALE 1"=1000'	SHEET 1 OF 5
	<small>DRAWN BY C.M.G.</small>		<small>OKLA. CA #2064, EXP. 06/30/2015 KANSAS CA #143, EXP. 12/31/2014</small>			

Mid-Continent Conductor, LLC

P.O. Box 1570, Woodward, OK 73802
Ph. 580-254-5400 Fax 580-254-3242

CEMENTING REPORT

Operator: Unit Corporation
Well Name: Ismert 1-23H
Legal Description: Reno Cnty, KS

Cement Casing Data	
Cementing Date	3/5/14
Size of Drill Bit (Inches)	28
Size of Casing (Inches O.D.)	16
Setting Depth of Casing (ft.) from ground level	160
Type of Cement	Common Cement
Sacks of Cement Used	144
Was cement circulated?	Yes
Job witnessed by: Spencer Brownlee	



Jeff M. Owen
Mid-Continent Conductor, LLC

ALLIED OIL & GAS SERVICES, LLC 062865

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Dreist Bend

DATE <u>4-1-14</u>	SEC. <u>23</u>	TWP. <u>25</u>	RANGE <u>10</u>	CALLED OUT <u>8:00 AM</u>	ON LOCATION <u>1:00 PM</u>	JOB START <u>3:15 PM</u>	JOB FINISH <u>4:15 PM</u>
LEASE <u>ESMent</u>		WELL # <u>23-1H</u>		LOCATION <u>Syria 75, 1/4 E, N15</u>		COUNTY <u>Perm</u>	STATE <u>Ks</u>
OLD OR NEW (Circle one) <u>NEW</u>							

CONTRACTOR Unit 303 OWNER Some

TYPE OF JOB liner

HOLE SIZE <u>8 3/4</u> T.D. <u>8500'</u>	CEMENT
CASING SIZE <u>4 1/2 + 5 1/2</u> DEPTH <u>8500'</u>	AMOUNT ORDERED <u>4000lb Class H, 1.1690</u>
TUBING SIZE _____ DEPTH _____	<u>Fl-160, 0.220 5x51</u>
DRILL PIPE _____ DEPTH _____	<u>1000 yd Dr 1100 H Sugar</u>
TOOL _____ DEPTH _____	COMMON <u>Class H 400 @ 21.20 8480.00</u>
PRES. MAX <u>2000#</u> MINIMUM <u>1020#</u>	POZMIX _____ @ _____
MEAS. LINE _____ SHOE JOINT <u>81</u>	GEL _____ @ _____
CEMENT LEFT IN CSG. <u>81</u>	CHLORIDE _____ @ _____
PERFS. _____	ASC _____ @ _____
DISPLACEMENT <u>158.83</u>	<u>Fl-160 225 @ 18.90 4252.50</u>

EQUIPMENT

PUMP TRUCK # <u>597</u> CEMENTER <u>Tom Dechman</u>	HELPER <u>Kevin Gady</u>
BULK TRUCK # <u>820-844</u> DRIVER <u>Brian Long</u>	
BULK TRUCK # _____ DRIVER _____	

<u>SASI 75 @ 17.55 1316.25</u>	
<u>Sugar 50 @ 2.00 100.00</u>	
<u>Dr 1100 1000 yd @ 58.70 1408.80</u>	
HANDLING <u>407.08 @ 2.48 1009.56</u>	
MILEAGE <u>18.95 x 50 2.60 2463.50</u>	
TOTAL <u>19030.61</u>	

REMARKS:

Ran 4430' of 4 1/2" cas. 4070' of 5 1/2" cas.
Set at 8500'. Holed up in Brkls circulation.
Pumped test line to 2000' - Pumped 1000
of Dr 1100 5 1/2" H2O. Mixed 4000lb Class
H, 0.220 Fl-160, 0.220 WAMS Pumped 2 bbls
Sugar H2O. Wanded up. Released plug.
Displaced with 40 bbls Sugar H2O +
118 H2O. Wanded plug at 2000'. Released
and float held.

SERVICE

DEPTH OF JOB <u>8500'</u>	
PUMP TRUCK CHARGE _____	<u>5899.75</u>
EXTRA FOOTAGE _____ @ _____	
MILEAGE <u>50 @ 7.70 385.00</u>	
MANIFOLD _____ @ _____	
<u>LPM 50 @ 4.40 220.00</u>	
TOTAL <u>6503.75</u>	

CHARGE TO: Dreist Petroleum

STREET _____

CITY _____ STATE _____ ZIP _____

Dechman
5

PLUG & FLOAT EQUIPMENT

_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL _____	

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.

PRINTED NAME X Glen Monday

SIGNATURE X Glen Monday

SALES TAX (If Any) _____

TOTAL CHARGES 25,534.36

DISCOUNT 10,213.74 IF PAID IN 30 DAYS

\$ 15,320.62

ALLIED OIL & GAS SERVICES, LLC 062712

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: great Bend

DATE <u>3-20-14</u>	SEC. <u>23</u>	TWP. <u>25</u>	RANGE <u>10</u>	CALLED OUT <u>12:00 pm</u>	ON LOCATION <u>4:00 pm</u>	JOB START <u>7:00pm</u>	JOB FINISH <u>8:00pm</u>
LEASE <u>clament</u>	WELL # <u>23-1H</u>		LOCATION <u>galvia 7 south 1/4 E</u>		COUNTY <u>Reed</u>	STATE <u>Kz</u>	
OLD OR NEW (Circle one) <u>NEW</u>			<u>N clmta</u>				

CONTRACTOR unit 303
 TYPE OF JOB intermediate
 HOLE SIZE 8 3/4" T.D. 4305
 CASING SIZE 7" DEPTH 435
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. 2 BBI above plug
 PERFS. _____
 DISPLACEMENT H2O
 EQUIPMENT _____
 PUMP TRUCK CEMENTER Charles Kingon
 # 597 HELPER Mike northon
 BULK TRUCK _____
 # 603 DRIVER Kevin weighouse
 BULK TRUCK _____
 # _____ DRIVER Braun lang

OWNER name
 CEMENT
 AMOUNT ORDERED 160 st Class A
57. gypsum 10% salt
 COMMON 160 @ 12.90 2864.00
 POZMIX _____ @ _____
 GEL _____ @ _____
 CHLORIDE _____ @ _____
 ASC _____ @ _____
gypsum 16 @ 37.60 601.60
salt 18 @ 26.35 474.30
 HANDLING ~~486.00~~ 196.00 @ 2.48 486.10
 MILEAGE 9.82 x 50 @ 2.60 1146.60
 TOTAL 5572.60

REMARKS:

Rig Ran 4315 7" cas Broke circulation
W/1 Rig mud pressure test to
2000# pump 10 BBI ahead mix
160-st class A 57. gypsum 10% salt
Release plug displace 165 BBI
H2O land plug @ 1400 psi float
did hold 2 BBI cement on top
of plug

SERVICE

DEPTH OF JOB 4305
 PUMP TRUCK CHARGE _____ 2765.25
 EXTRA FOOTAGE _____ @ _____
 MILEAGE 50 @ 7.70 385.00
 MANIFOLD _____ @ _____
Head Rent @ 275 275.00
Lvm 50 @ 4.40 220.00

CHARGE TO: unit petroleum
 STREET _____
 CITY _____ STATE _____ ZIP _____

TOTAL 3645.75

PLUG & FLOAT EQUIPMENT

success float shoe @ _____ 712.53
2-throat ore @ 83.07 166.14
Rubber plug @ 99.45 99.45
 TOTAL 978.12

Thank you!
 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 10196.47
 DISCOUNT 3687.34 IF PAID IN 30 DAYS
\$ 6509.13

PRINTED NAME X M. VALENZUELA
 SIGNATURE X [Signature]

ALLIED OIL & GAS SERVICES, LLC 062859

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: West Bend, TX

DATE <u>3-16-14</u>	SEC. <u>23</u>	TWP. <u>25</u>	RANGE <u>10</u>	CALLED OUT <u>5:00 AM</u>	ON LOCATION <u>8:00 AM</u>	JOB START <u>11:30 AM</u>	JOB FINISH <u>12:30 PM</u>
LEASE <u>LSMST</u>		WELL # <u>231-H</u>		LOCATION <u>Sy Davis 7 South 1/4 East</u>		COUNTY <u>Rego</u>	STATE <u>Ka</u>
OLD OR NEW (Circle one) <u>NEW</u>				<u>North into</u>			

CONTRACTOR <u>DWST 303</u>	OWNER <u>Same</u>
TYPE OF JOB <u>Surface</u>	
HOLE SIZE <u>12 1/4"</u>	T.D. <u>1540</u>
CASING SIZE <u>9 5/8"</u>	DEPTH <u>1540</u>
TUBING SIZE _____	DEPTH _____
DRILL PIPE _____	DEPTH _____
TOOL _____	DEPTH _____
PRES. MAX <u>1000"</u>	MINIMUM <u>550"</u>
MEAS. LINE _____	SHOE JOINT <u>A</u>
CEMENT LEFT IN CSG. <u>2'</u>	
PERFS. _____	
DISPLACEMENT <u>119 1/2</u>	

CEMENT			
AMOUNT ORDERED <u>300# AMO 280 typical</u>			
<u>280# NUS, 280# cc, 1/2 # 55# cement / gal - 280# float</u>			
<u>A, 280# cc, 1/2 # 55# cement / gal - 280# Sugar</u>			
COMMON <u>280</u>	@ <u>17.50</u>	<u>5012.00</u>	
POZMIX _____	@ _____		
GEL _____	@ _____		
CHLORIDE <u>15</u>	@ <u>14.00</u>	<u>910.00</u>	
ASC _____	@ _____		
<u>AMO</u> <u>300</u>	@ <u>25.90</u>	<u>7770.00</u>	
<u>Float</u> <u>145</u>	@ <u>2.97</u>	<u>430.65</u>	
<u>Sugar</u> <u>200</u>	@ <u>2.00</u>	<u>424.00</u>	
_____	@ _____		
_____	@ _____		
_____	@ _____		
_____	@ _____		
HANDLING <u>633.41</u>	@ <u>2.48</u>	<u>1570.87</u>	
MILEAGE <u>1922.09</u>	@ <u>2.60</u>	<u>3697.22</u>	
			TOTAL <u>19,814.94</u>

EQUIPMENT	
PUMP TRUCK	CEMENTER <u>Tom Nelson</u>
# <u>597</u>	HELPER <u>Kevin Eddy</u>
BULK TRUCK	
# <u>599</u>	DRIVER <u>Kevin Waymon</u>
BULK TRUCK	
# <u>603</u>	DRIVER <u>Don Cooper</u>

REMARKS:

Run 1540' of 9 5/8" cc. Break Circulation Pumped
5 Hole H2O mixed 300# AMO 280 typical
280# Nus, 280# cc, 1/2 # 55# cement / gal. Released
280# float cement, 280# cc, 1/2 # 55# cement / gal. Released
Plug. Displaced with H2O. Landed Plug at
1000' # Released a float Hold
Cement did Circulate.
(Approx 150 lbs cement to pit)

SERVICE

DEPTH OF JOB <u>1540'</u>		
PUMP TRUCK CHARGE _____		<u>2213.75</u>
EXTRA FOOTAGE _____	@ _____	
MILEAGE <u>50</u>	@ <u>7.70</u>	<u>385.00</u>
MANIFOLD _____	@ _____	
<u>Head Rent</u>	@ <u>275.00</u>	<u>275.00</u>
<u>Lm</u> <u>50</u>	@ <u>4.40</u>	<u>220.00</u>

TOTAL 3093.75

CHARGE TO: DWST Petroleum
 STREET _____
 CITY _____ STATE _____ ZIP _____

Thanks

PLUG & FLOAT EQUIPMENT

<u>2'</u>		
<u>Double Plug</u>	@ <u>184.86</u>	<u>184.86</u>
<u>Success float shoe</u>	@ <u>1213.29</u>	<u>1213.29</u>
<u>5. Centralizer</u>	@ <u>87.75</u>	<u>438.75</u>
<u>2. Thread Lock</u>	@ <u>83.07</u>	<u>116.14</u>
<u>1. Basket</u>	@ <u>594.36</u>	<u>594.36</u>

TOTAL 2597.40

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.

PRINTED NAME X Max Lopez

SIGNATURE X [Signature]

SALES TAX (If Any) _____
 TOTAL CHARGES 25,556.09
 DISCOUNT 9720.29 IF PAID IN 30 DAYS
15,835.80

Unit Petroleum

Reno County, Kansas [NAD 83]

Section 23 T25S-R10W

Ismert 23 #1H

OH

Plan: Design #1

Standard Planning Report

06 March, 2014

INWELL INC.



Unit Petroleum
 Project: Reno County, Kansas [NAD 83]
 Site: Section 23 T25S-R10W
 Well: Ismert 23 #1H
 Wellbore: OH
 Design: Design #1
 Lat: 37° 51' 11.520 N
 Long: 98° 23' 46.985 W
 Pad GL: 1728.00
 KB: 20' KB @ 1748.00usft (UDI 303)



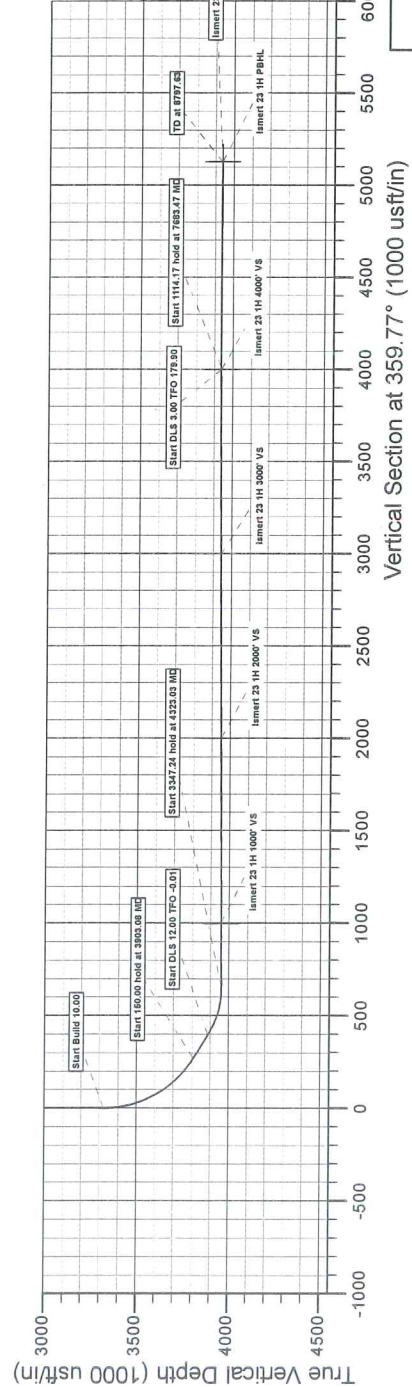
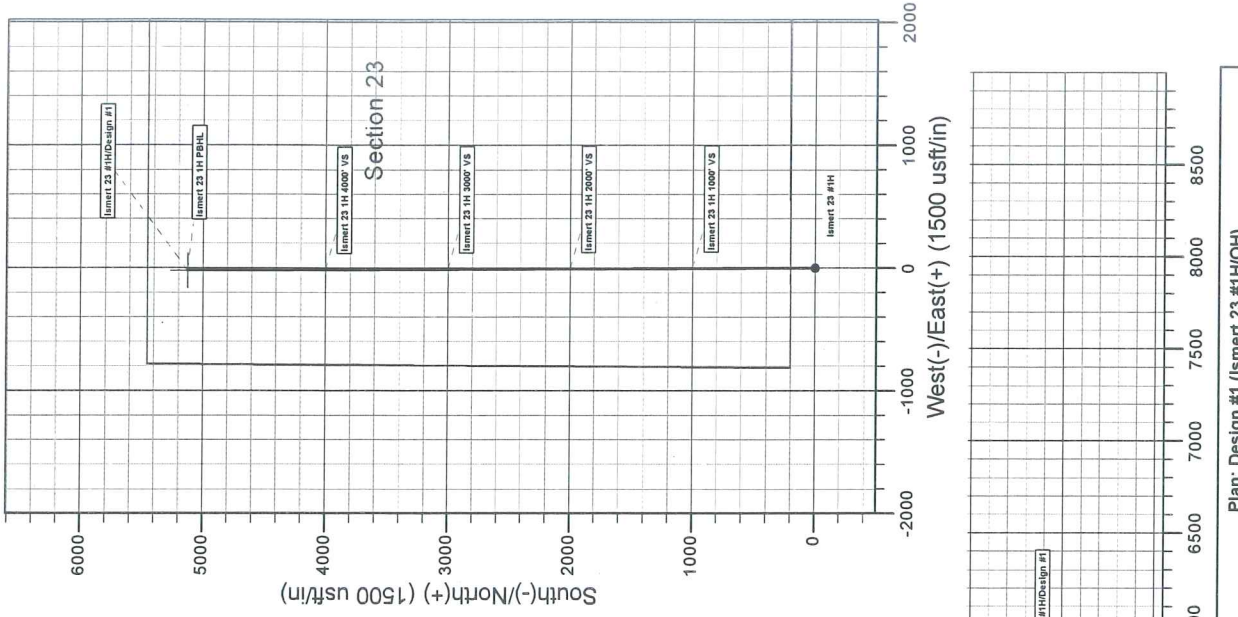
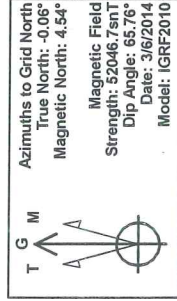
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Slot
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3323.08	0.00	0.00	3323.08	0.00	0.00	0.00	0.00	0.00	
3903.08	58.00	359.77	3808.98	269.33	-1.08	0.00	0.00	269.34	
4053.08	58.00	359.77	3888.46	396.54	-1.59	10.00	359.77	396.54	
4323.03	90.39	359.76	3961.00	652.84	-2.63	12.00	0.00	652.84	
4683.47	90.39	359.76	3938.00	3999.97	-16.38	0.00	0.00	4000.00	
7683.47	90.00	359.77	3937.95	4013.17	-16.44	3.00	179.90	4013.20	
8797.63	90.00	359.77	3938.00	5127.33	-21.00	0.00	0.00	5127.37	

WELL DETAILS: Ismert 23 #1H				
+N/-S	+E/-W	Northing	Easting	Ground Level:
0.00	0.00	1744393.00	1342249.00	37° 51' 11.520 N
				98° 23' 46.985 W

PROJECT DETAILS: Reno County, Kansas [NAD 83]
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Kansas Southern Zone
 System Datum: Mean Sea Level

WELLBORE TARGET DETAILS (LAT/LONG)				
Name	+N/-S	+E/-W	Northing	Easting
Ismert 23 1H 4000' VS	3999.97	-16.38	1748392.71	1342232.62
Ismert 23 1H PBHL	5127.33	-21.00	1749520.00	1342228.00
Ismert 23 1H 2000' VS	2999.97	-12.29	1747392.78	1342236.71
Ismert 23 1H 1000' VS	1999.98	-8.19	1746392.86	1342240.81
Ismert 23 1H 0000' VS	999.99	-4.10	1745392.93	1342244.90

NOTE: All Lease lines and Hard lines are estimates only and are subject to the customers' approval.





Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ismert 23 #1H
Company:	Unit Petroleum	TVD Reference:	20' KB @ 1748.00usft (UDI 303)
Project:	Reno County, Kansas [NAD 83]	MD Reference:	20' KB @ 1748.00usft (UDI 303)
Site:	Section 23 T25S-R10W	North Reference:	Grid
Well:	Ismert 23 #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Project	Reno County, Kansas [NAD 83]		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Kansas Southern Zone		Using geodetic scale factor

Site	Section 23 T25S-R10W				
Site Position:		Northing:	1,744,393.00 usft	Latitude:	37° 51' 11.520 N
From:	Map	Easting:	1,342,249.00 usft	Longitude:	98° 23' 46.985 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.06 °

Well	Ismert 23 #1H					
Well Position	+N/-S	0.00 usft	Northing:	1,744,393.00 usft	Latitude:	37° 51' 11.520 N
	+E/-W	0.00 usft	Easting:	1,342,249.00 usft	Longitude:	98° 23' 46.985 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	1,728.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/6/2014	4.60	65.76	52,047

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.77

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,323.08	0.00	0.00	3,323.08	0.00	0.00	0.00	0.00	0.00	0.00	
3,903.08	58.00	359.77	3,808.98	269.33	-1.08	10.00	10.00	0.00	359.77	
4,053.08	58.00	359.77	3,888.46	396.54	-1.59	0.00	0.00	0.00	0.00	
4,323.03	90.39	359.76	3,961.00	652.84	-2.63	12.00	12.00	0.00	-0.01	
7,670.26	90.39	359.76	3,938.00	3,999.97	-16.38	0.00	0.00	0.00	0.00	Ismert 23 1H 4000' V
7,683.47	90.00	359.77	3,937.95	4,013.17	-16.44	3.00	-3.00	0.01	179.90	
8,797.63	90.00	359.77	3,938.00	5,127.33	-21.00	0.00	0.00	0.00	0.00	Ismert 23 1H PBHL



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ismert 23 #1H
Company:	Unit Petroleum	TVD Reference:	20' KB @ 1748.00usft (UDI 303)
Project:	Reno County, Kansas [NAD 83]	MD Reference:	20' KB @ 1748.00usft (UDI 303)
Site:	Section 23 T25S-R10W	North Reference:	Grid
Well:	Ismert 23 #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,323.08	0.00	0.00	3,323.08	0.00	0.00	0.00	0.00	0.00	0.00	
3,350.00	2.69	359.77	3,349.99	0.63	0.00	0.63	10.00	10.00	0.00	
3,400.00	7.69	359.77	3,399.77	5.16	-0.02	5.16	10.00	10.00	0.00	
3,450.00	12.69	359.77	3,448.96	14.00	-0.06	14.00	10.00	10.00	0.00	
3,500.00	17.69	359.77	3,497.20	27.10	-0.11	27.10	10.00	10.00	0.00	
3,550.00	22.69	359.77	3,544.11	44.35	-0.18	44.35	10.00	10.00	0.00	
3,600.00	27.69	359.77	3,589.34	65.63	-0.26	65.63	10.00	10.00	0.00	
3,650.00	32.69	359.77	3,632.55	90.76	-0.36	90.76	10.00	10.00	0.00	
3,700.00	37.69	359.77	3,673.40	119.57	-0.48	119.57	10.00	10.00	0.00	
3,750.00	42.69	359.77	3,711.58	151.83	-0.61	151.83	10.00	10.00	0.00	
3,800.00	47.69	359.77	3,746.80	187.29	-0.75	187.29	10.00	10.00	0.00	
3,850.00	52.69	359.77	3,778.80	225.69	-0.91	225.69	10.00	10.00	0.00	
3,903.08	58.00	359.77	3,808.98	269.33	-1.08	269.34	10.00	10.00	0.00	
4,000.00	58.00	359.77	3,860.34	351.53	-1.41	351.53	0.00	0.00	0.00	
4,053.08	58.00	359.77	3,888.46	396.54	-1.59	396.54	0.00	0.00	0.00	
4,075.00	60.63	359.77	3,899.65	415.39	-1.67	415.39	12.00	12.00	0.00	
4,100.00	63.63	359.77	3,911.33	437.49	-1.76	437.49	12.00	12.00	0.00	
4,125.00	66.63	359.77	3,921.85	460.17	-1.85	460.17	12.00	12.00	0.00	
4,150.00	69.63	359.77	3,931.16	483.36	-1.94	483.37	12.00	12.00	0.00	
4,175.00	72.63	359.77	3,939.24	507.02	-2.04	507.02	12.00	12.00	0.00	



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ismert 23 #1H
Company:	Unit Petroleum	TVD Reference:	20' KB @ 1748.00usft (UDI 303)
Project:	Reno County, Kansas [NAD 83]	MD Reference:	20' KB @ 1748.00usft (UDI 303)
Site:	Section 23 T25S-R10W	North Reference:	Grid
Well:	Ismert 23 #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,200.00	75.63	359.77	3,946.08	531.06	-2.14	531.07	12.00	12.00	0.00
4,225.00	78.63	359.77	3,951.65	555.43	-2.24	555.44	12.00	12.00	0.00
4,250.00	81.63	359.77	3,955.93	580.06	-2.34	580.06	12.00	12.00	0.00
4,275.00	84.63	359.77	3,958.92	604.88	-2.44	604.88	12.00	12.00	0.00
4,300.00	87.63	359.77	3,960.61	629.82	-2.54	629.82	12.00	12.00	0.00
4,323.03	90.39	359.76	3,961.00	652.84	-2.63	652.84	12.00	12.00	0.00
4,400.00	90.39	359.76	3,960.48	729.81	-2.95	729.81	0.00	0.00	0.00
4,500.00	90.39	359.76	3,959.79	829.80	-3.36	829.81	0.00	0.00	0.00
4,600.00	90.39	359.76	3,959.10	929.80	-3.77	929.81	0.00	0.00	0.00
4,700.00	90.39	359.76	3,958.41	1,029.80	-4.18	1,029.81	0.00	0.00	0.00
4,800.00	90.39	359.76	3,957.73	1,129.79	-4.59	1,129.80	0.00	0.00	0.00
4,900.00	90.39	359.76	3,957.04	1,229.79	-5.00	1,229.80	0.00	0.00	0.00
5,000.00	90.39	359.76	3,956.35	1,329.79	-5.41	1,329.80	0.00	0.00	0.00
5,100.00	90.39	359.76	3,955.66	1,429.78	-5.83	1,429.80	0.00	0.00	0.00
5,200.00	90.39	359.76	3,954.98	1,529.78	-6.24	1,529.79	0.00	0.00	0.00
5,300.00	90.39	359.76	3,954.29	1,629.78	-6.65	1,629.79	0.00	0.00	0.00
5,400.00	90.39	359.76	3,953.60	1,729.77	-7.06	1,729.79	0.00	0.00	0.00
5,500.00	90.39	359.76	3,952.92	1,829.77	-7.47	1,829.79	0.00	0.00	0.00
5,600.00	90.39	359.76	3,952.23	1,929.77	-7.88	1,929.78	0.00	0.00	0.00
5,700.00	90.39	359.76	3,951.54	2,029.77	-8.29	2,029.78	0.00	0.00	0.00
5,800.00	90.39	359.76	3,950.85	2,129.76	-8.70	2,129.78	0.00	0.00	0.00
5,900.00	90.39	359.76	3,950.17	2,229.76	-9.11	2,229.78	0.00	0.00	0.00
6,000.00	90.39	359.76	3,949.48	2,329.76	-9.52	2,329.78	0.00	0.00	0.00
6,100.00	90.39	359.76	3,948.79	2,429.75	-9.93	2,429.77	0.00	0.00	0.00
6,200.00	90.39	359.76	3,948.10	2,529.75	-10.34	2,529.77	0.00	0.00	0.00
6,300.00	90.39	359.76	3,947.42	2,629.75	-10.75	2,629.77	0.00	0.00	0.00
6,400.00	90.39	359.76	3,946.73	2,729.74	-11.17	2,729.77	0.00	0.00	0.00
6,500.00	90.39	359.76	3,946.04	2,829.74	-11.58	2,829.76	0.00	0.00	0.00
6,600.00	90.39	359.76	3,945.36	2,929.74	-11.99	2,929.76	0.00	0.00	0.00
6,700.00	90.39	359.76	3,944.67	3,029.73	-12.40	3,029.76	0.00	0.00	0.00
6,800.00	90.39	359.76	3,943.98	3,129.73	-12.81	3,129.76	0.00	0.00	0.00
6,900.00	90.39	359.76	3,943.29	3,229.73	-13.22	3,229.75	0.00	0.00	0.00
7,000.00	90.39	359.76	3,942.61	3,329.72	-13.63	3,329.75	0.00	0.00	0.00
7,100.00	90.39	359.76	3,941.92	3,429.72	-14.04	3,429.75	0.00	0.00	0.00
7,200.00	90.39	359.76	3,941.23	3,529.72	-14.45	3,529.75	0.00	0.00	0.00
7,300.00	90.39	359.76	3,940.54	3,629.71	-14.86	3,629.74	0.00	0.00	0.00
7,400.00	90.39	359.76	3,939.86	3,729.71	-15.27	3,729.74	0.00	0.00	0.00
7,500.00	90.39	359.76	3,939.17	3,829.71	-15.68	3,829.74	0.00	0.00	0.00
7,600.00	90.39	359.76	3,938.48	3,929.70	-16.10	3,929.74	0.00	0.00	0.00
7,670.26	90.39	359.76	3,938.00	3,999.97	-16.38	4,000.00	0.00	0.00	0.00
7,683.47	90.00	359.77	3,937.95	4,013.17	-16.44	4,013.20	3.00	-3.00	0.01
7,700.00	90.00	359.77	3,937.96	4,029.70	-16.51	4,029.74	0.00	0.00	0.00
7,800.00	90.00	359.77	3,937.96	4,129.70	-16.92	4,129.74	0.00	0.00	0.00
7,900.00	90.00	359.77	3,937.96	4,229.70	-17.32	4,229.74	0.00	0.00	0.00
8,000.00	90.00	359.77	3,937.97	4,329.70	-17.73	4,329.74	0.00	0.00	0.00
8,100.00	90.00	359.77	3,937.97	4,429.70	-18.14	4,429.74	0.00	0.00	0.00
8,200.00	90.00	359.77	3,937.98	4,529.70	-18.55	4,529.74	0.00	0.00	0.00
8,300.00	90.00	359.77	3,937.98	4,629.70	-18.96	4,629.74	0.00	0.00	0.00
8,400.00	90.00	359.77	3,937.98	4,729.70	-19.37	4,729.74	0.00	0.00	0.00
8,500.00	90.00	359.77	3,937.99	4,829.70	-19.78	4,829.74	0.00	0.00	0.00
8,600.00	90.00	359.77	3,937.99	4,929.69	-20.19	4,929.74	0.00	0.00	0.00
8,700.00	90.00	359.77	3,938.00	5,029.69	-20.60	5,029.74	0.00	0.00	0.00
8,797.63	90.00	359.77	3,938.00	5,127.33	-21.00	5,127.37	0.00	0.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ismert 23 #1H
Company:	Unit Petroleum	TVD Reference:	20' KB @ 1748.00usft (UDI 303)
Project:	Reno County, Kansas [NAD 83]	MD Reference:	20' KB @ 1748.00usft (UDI 303)
Site:	Section 23 T25S-R10W	North Reference:	Grid
Well:	Ismert 23 #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Ismert 23 1H PBHL	0.00	0.00	3,938.00	5,127.33	-21.00	1,749,520.00	1,342,228.00	37° 52' 2.209 N	98° 23' 47.176 W
- plan hits target center									
- Point									
Ismert 23 1H 4000' VS	0.00	0.00	3,938.00	3,999.97	-16.38	1,748,392.71	1,342,232.62	37° 51' 51.064 N	98° 23' 47.134 W
- plan hits target center									
- Point									



Unit Petroleum Company

Date of Last Revision:
23-Jun-14

Well: Ismert 23 #1H
Location: 23-25S-10W
County, State: Reno County, KS
Surface Location: 255' FSL and 760' FWL

API No.: 1515521679
Rig: Unit Drilling #331
Engineer: Tom Carrington (918) 477-4535
Geology: Rob Wilson (918) 477-5728

OH Size

