



Confidentiality Requested:

Yes No

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
-----------------------------------	-----------------	---

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: _____

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
--	---

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: Yes No

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	Tait A 4
Doc ID	1257508

All Electric Logs Run

ARRAY COMPENSATED TRUE RESISTIVITY LOG
BOREHOLE COMPENSATED SONIC ARRAY LOG
MICROLOG
QUAD COMBO LOG
SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	Tait A 4
Doc ID	1257508

Tops

Name	Top	Datum
HEEBNER	3903	
TORONTO	3921	
LANSING	4005	
IOLA	4148	
MARMATON	4510	
PAWNEE	4595	
CHEROKEE	4639	
ATOKA	4803	
MORROW	4852	
ST LOUIS	5092	
ST GENEVIEVE	5092	
SPERGEN	5299	

Summary of Changes

Lease Name and Number: Tait A 4

API/Permit #: 15-055-22349-01-00

Doc ID: 1257508

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	02/05/2015	07/10/2015
Contractor License Number	35070	99975
Contractor Name	Saxon Drilling, LP	COMPANY SERVICING TOOLS
Kelly Bushing Elevation	2912	2911
Save Link	../..//kcc/detail/operatorEditDetail.cfm?docID=1241533	../..//kcc/detail/operatorEditDetail.cfm?docID=1257508



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1241533
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

CONFIDENTIAL 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
-----------------------------------	-----------------	---

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: _____

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 Geologist Report / Mud Logs <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
--	---

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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	---	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	Tait A 4
Doc ID	1241533

All Electric Logs Run

ARRAY COMPENSATED TRUE RESISTIVITY LOG
BOREHOLE COMPENSATED SONIC ARRAY LOG
MICROLOG
QUAD COMBO LOG
SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	Tait A 4
Doc ID	1241533

Tops

Name	Top	Datum
HEEBNER	3903	
TORONTO	3921	
LANSING	4005	
IOLA	4148	
MARMATON	4510	
PAWNEE	4595	
CHEROKEE	4639	
ATOKA	4803	
MORROW	4852	
ST LOUIS	5092	
ST GENEVIEVE	5092	
SPERGEN	5299	

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	Tait A 4
Doc ID	1241533

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	5050-5054 CHESTER		5050-5054

ALLIED OIL & GAS SERVICES, LLC 052971

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

Liberal KS.

DATE <u>10-23-14</u>	SEC. <u>10</u>	TWP. <u>25S</u>	RANGE <u>33W</u>	CALLED OUT	ON LOCATION	JOB START <u>7:00 PM</u>	JOB FINISH <u>8:45 PM</u>
LEASE <u>Tait</u>	WELL# <u>A-4</u>	LOCATION <u>Sublette KS, N to Annie Scherbel</u>			COUNTY <u>Finnery</u>	STATE <u>KS.</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)				W 1/4 @ Mycoysa Sign, 3 N, W into			

CONTRACTOR Saxon 146
TYPE OF JOB Surface
HOLE SIZE 12 1/4" T.D. 1692'
CASING SIZE 8 5/8" DEPTH 1692'
TUBING SIZE _____ DEPTH _____
DRILL PIPE _____ DEPTH _____
TOOL _____ DEPTH _____
PRESS. MAX 2500 MINIMUM 600
WEAS. LINE _____ SHOE JOINT 42
CEMENT LEFT IN CSG. 42
PERFS. _____
DISPLACEMENT 105.11 BBL

OWNER

CEMENT

AMOUNT ORDERED Lead = 350 SK of AMO-Class C, 2% Gyp, 2% NAMS, 3% CC, 25% 1/2" Flo-Seal, 2% SAs
Tail = 245 SK, Class C, 3% CC, 25% 1/2" Flo-Seal

COMMON	245	@	24.40	5978.00
AMO-Class C	350	@	31.00	10850.00
Flo-Seal	150	@	2.97	445.50
CHLORIDE	22	@	64.00	1408.00
SA-51	66	@	17.55	1158.30
		@		
		@		
		@		
		@		
		@		
		@		

EQUIPMENT

PUMP TRUCK CEMENTER Kenny Baera
530-484 HELPER Jaine Maldonado
BULK TRUCK Holguin
955-692 DRIVER Tony H./Justin Talley
BULK TRUCK
994-642 DRIVER "Pepe" Jose Garcia

REMARKS:

AFE#34739

TOTAL 19839.80

SERVICE

16 hours
Circulated Cement to Surface = 100 BBL / Stand By Time @ 440.00 2640.00
PUMP TRUCK CHARGE 1 @ 2058.50 2058.50
Light V Mileage 50 @ 4.40 220.00
MILEAGE 50 @ 7.70 385.00
MANIFOLD 1 @ 275.00 275.00
Handling 665.87 @ 2.48 1651.36
Drainage 1478.46 @ 2.60 3844.00

TOTAL 11073.86

PLUG & FLOAT EQUIPMENT

New Rotating SS Float Collar @ 1440.00 1440.00
New Rotating WF Plug @ 418.60 418.60
Centralizers 14 @ 75.00 1050.00
Reg Guide Shoe @ 460.00 460.00
Clamp / Stop Collar @ 56.00 56.00

TOTAL 3424.60

SALES TAX (If Any) _____

TOTAL CHARGES \$ 34338.26

DISCOUNT _____ IF PAID IN 30 DAYS

Net \$ 23006.63

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 Gene Bilby

SIGNATURE Gene Bilby

CHARGE TO: Merit Energy
STREET _____
CITY _____ STATE _____ ZIP _____

ALLIED OIL & GAS SERVICES, LLC 061683

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Liberal (21)

DATE <i>10-30-14</i>	SEC. <i>10</i>	TWP. <i>25</i>	RANGE <i>33</i>	CALLED OUT	ON LOCATION	JOB START <i>6:00pm</i>	JOB FINISH <i>7:00pm</i>
LEASE <i>Tait</i>	WELL # <i>4</i>	LOCATION <i>Garden City KS, Annie Sheer RD</i>			COUNTY <i>Finnay</i>	STATE <i>KS</i>	
OLD OR NEW (Circle one) <i>NEW</i>		<i>5, west, 3, North, west into</i>					

CONTRACTOR <i>Saxon 146</i>	OWNER
TYPE OF JOB <i>Production</i>	
HOLE SIZE <i>7 7/8</i>	T.D. <i>5458</i>
CASING SIZE <i>5 1/2</i>	DEPTH <i>5447.68</i>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX <i>2000</i>	MINIMUM
MEAS. LINE	SHOE JOINT <i>44.03</i>
CEMENT LEFT IN CSG. <i>1 BBL</i>	
PERFS.	
DISPLACEMENT <i>185.3 BBL</i>	

EQUIPMENT		COMMON	@	
PUMP TRUCK	CEMENTER <i>Aldo Espinosa</i>	POZMIX	@	
# <i>903-501</i>	HELPER <i>Ricardo Estrada</i>	GEL	@	
BULK TRUCK		CHLORIDE	@	
# <i>930-534</i>	DRIVER <i>José M. Garcia</i>	ASC	@	
BULK TRUCK		<i>Super flush 12 bbl</i>	@	<i>58.70 704.40</i>
#	DRIVER	<i>Gyp seal 27 ss</i>	@	<i>37.60 1,015.80</i>
		<i>30/50 class # 310 ss</i>	@	<i>16.85 5,283.50</i>
		<i>Salt 19 ss</i>	@	<i>26.35 500.65</i>
		<i>Gilsonite 1550 #</i>	@	<i>.98 1,519.00</i>
		<i>Flo seal 78 #</i>	@	<i>2.97 231.66</i>
		<i>FL-160 131 #</i>	@	<i>18.90 2,475.90</i>
		<i>CD-31 53 #</i>	@	<i>10.30 545.90</i>
		HANDLING	@	
		MILEAGE	@	

REMARKS:

AFE 34739
GL # 83001075

TOTAL *12,216.21*

CHARGE TO: *Merit Energy*
STREET *PO Box 250*
CITY *Holcomb* STATE *KS* ZIP *67851*

SERVICE	
<i>Circulating Iron</i>	<i>400.00</i>
DEPTH OF JOB <i>Derrick charge</i>	<i>577.50</i>
PUMP TRUCK CHARGE	<i>3,099.25</i>
EXTRA FOOTAGE <i>LVM 50m @</i>	<i>4.40 220.00</i>
MILEAGE <i>HVM 50mi @</i>	<i>7.70 385.00</i>
MANIFOLD <i>1</i>	<i>@ 225.00 225.00</i>
<i>Handling 417.69 FT³</i>	<i>@ 2.48 1,035.87</i>
<i>Drayage 787.33 T-m @</i>	<i>2.60 2,047.05</i>
TOTAL	<i>8,039.67</i>

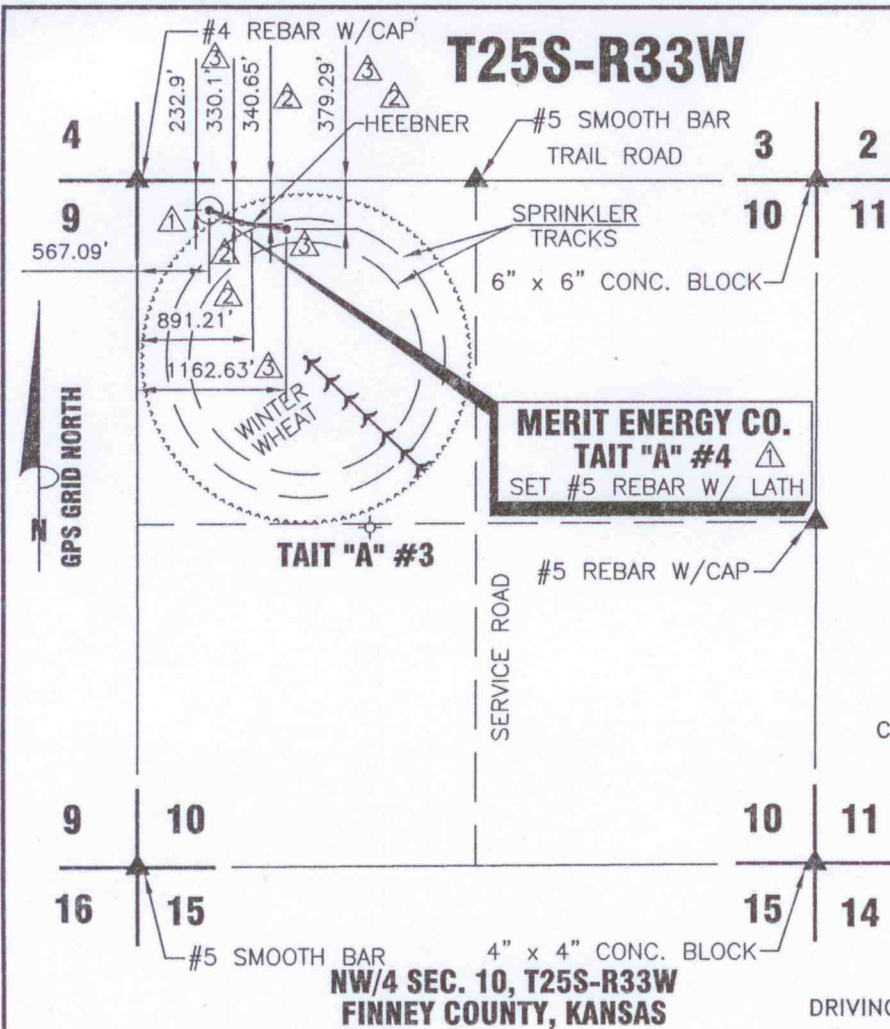
PLUG & FLOAT EQUIPMENT

<i>Guide shoe 1</i>	<i>@ 280.80 280.80</i>
<i>SS Float Collar 1</i>	<i>@ 725.40 725.40</i>
<i>Centralizers 20</i>	<i>@ 57.33 1,146.60</i>
<i>Stop Collar 1</i>	<i>@ 49.14 49.14</i>
<i>Top Rubber Plug</i>	<i>@ 258.26 258.26</i>
TOTAL	<i>2,460.20</i>

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 *Calvin Curry*
SIGNATURE *[Signature]*

SALES TAX (If Any) _____
TOTAL CHARGES *22,716.08*
DISCOUNT _____ IF PAID IN 30 DAYS
NET = *15,219.77*



DATE 3/3/2014

OPERATOR △ MERIT ENERGY CO.

WELL NAME TAIT "A" #4

LOCATION NW/4 SEC.10, T25S-R33W

SURFACE HOLE LOCATION

FOOTAGES & △ 232.9' F N L

RELATIONS △ 567.09' F W L

ELEVATION △ 2897.15'

BOTTOM HOLE LOCATION

FOOTAGES & △ 1162.63' F W L

RELATIONS △ 379.29' F N L

CALC. ELEVATION △ -2606.25'

DISTANCE TO EXISTING WELL
△ 2749.40' TAIT "A" #3

AUTHORIZED BY IDANIA MEDINA

CROP WINTER WHEAT

SURFACE HOLE LOCATION

LATITUDE 37°54'06.04997" N = 37.901681° N △

LONGITUDE 100°56'09.57391" W = 100.935993° W △

STATE PLANE COORD. X = 1297206.70 △

KANSAS SOUTH ZONE
NAD 27 Y = 458867.49 △

BOTTOM HOLE LOCATION

LATITUDE 37°54'04.61419" N = 37.901282° N △

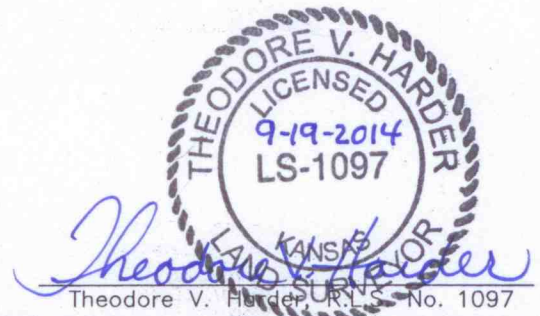
LONGITUDE 100°56'02.14096" W = 100.933928° W △

STATE PLANE COORD. X = 1297798.45 △

KANSAS SOUTH ZONE
NAD 27 Y = 458706.76 △

NOTE: CONTRACTOR TO CONTACT ONE CALL @ 1-800-DIG SAFE PRIOR TO ANY EXCAVATION OR CONSTRUCTION.

DRIVING DIRECTIONS USED TO STAKE WELL FROM KNOWN LANDMARK OR CITY FROM:
FROM GIGOT FARMS GATE AT THE CENTER OF SECTION 22 T24S-R33W; THENCE SOUTH 3.6 MILES; THENCE WEST 2061.42 FT. INTO.



MERIT ENERGY COMPANY
13727 NOEL ROAD, SUITE 1200 DALLAS, TEXAS 75240
MAIN PHONE: 972-701-8377 FACSIMILE: 972-701-8381

NO.	DWN.	REVISIONS	DATE
△	DRF	WELL SURFACE RELOC.	6/25/2014
△	DRF	HEEBNER LOCATION	9/16/2014
△	DRF	P.I. & NEW BHL	9/17/2014

HARDER
AND ASSOCIATES "locating our world"
LAND SURVEYING - GPS SPECIALISTS
P.O. BOX 518 514 MORTON
Elkhart, Kansas 67950
Phone: (620) 697-2696
Fax: (620) 697-4175
E-MAIL: tharder@elkhart.com

CO KS NM OK

PROPOSED WELL LOCATION OF THE TAIT "A" #4 LOCATED IN THE NW/4 SEC. 10, T25S - R33W FINNEY COUNTY, KANSAS

SCALE: 1"=1500' DATE: 3/3/2014

DRAWN BY: DRF CHECKED BY: TVH APPROVED BY: AUTHORIZED BY: I. MEDINA

WORK ORDER NO.:



**PHOENIX
TECHNOLOGY SERVICES**

November 18, 2014

Merit Energy Company
Attention: Regulatory Department
13727 Noel Rd., Suite 1200
Dallas, TX 75240

Re: Merit Energy
Tait A-4
Finney County, KS
API #15-055-22349-01-00
Job No. 1411490

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the survey certification, surveys, and lease plat for the above referenced well with the State of Kansas Oil Conservation Division – District 1 via certified mail. A copy of the filing is attached for your records.

Name of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Eric Neel	A-4	1,757	5,409	10/24/14	10/27/14	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Dana Robinson

Dana Robinson
Operations Administrator

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER **1411490**

OPERATOR **Merit Energy**

WELL NAME **Tait A-4**

COUNTY & STATE **Finney, KS**

API WELL NUMBER **15-055-22349-01-00**

PROPOSED DIRECTION **105.2**

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
1625.99	1,625.96 ft	.7 ft	23.47	4.19	-0.24	Scientific Gyro

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
24-Oct-14	1,757 ft	0.8	24.9

SURVEY INSTRUMENT TYPE
Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
27-Oct-14	5,409 ft	6.9	100.1

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
27-Oct-14	5,489 ft	6.9	100.1

Eric Neel

PRINT YOUR NAME ABOVE

Eric Neel

SIGN YOUR NAME ABOVE

10/27/2014

TODAY'S DATE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.1
DECLINATION OR GRID	DECLINATION

MWD SUPERVISOR 1

Eric Neel

DIRECTIONAL DRILLER 1

Brandon Coatney

MWD SUPERVISOR 2

Charles Murphey

DIRECTIONAL DRILLER 2

0



MERIT ENERGY COMPANY

Merit Energy

Finney County, Kansas (NAD 27)

Tait

A-4

Wellbore #1 Job #1411490

Survey: Phoenix MWD Surveys

Standard Survey Report

28 October, 2014





Phoenix Technology Services

Survey Report



Company: Merit Energy	Local Co-ordinate Reference: Well A-4	
Project: Finney County, Kansas (NAD 27)	TVD Reference: WELL @ 2912.00usft (Saxon 146)	
Site: Tait	MD Reference: WELL @ 2912.00usft (Saxon 146)	
Well: A-4	North Reference: Grid	
Wellbore: Wellbore #1 Job #1411490	Survey Calculation Method: Minimum Curvature	
Design: Surveys (Saxon 146)	Database: Compass 5000 GCR epdm	

Project Finney County, Kansas (NAD 27)	System Datum: Mean Sea Level
Map System: US State Plane 1927 (Exact solution)	
Geo Datum: NAD 1927 (NADCON CONUS)	
Map Zone: Kansas South 1502	

Site Tait	
Site Position:	Northing: 458,867.49 usft Latitude: 37° 54' 6.04977 N
From: Map	Easting: 1,297,206.70 usft Longitude: 100° 56' 9.57390 W
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 " Grid Convergence: -1.50 °

Well A-4	
Well Position +N/-S 0.00 usft	Northing: 458,867.49 usft Latitude: 37° 54' 6.04977 N
+E/-W 0.00 usft	Easting: 1,297,206.70 usft Longitude: 100° 56' 9.57390 W
Position Uncertainty 0.00 usft	Wellhead Elevation: 0.00 usft Ground Level: 2,897.00 usft

Wellbore Wellbore #1 Job #1411490					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	10/16/14	6.10	65.46	51,816

Design Surveys (Saxon 146)					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00			
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	105.20	

Survey Program Date 10/28/14				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
50.00	1,625.99	Scientific Gyros (Wellbore #1 Job #141149)	NS-GYRO-MS	North sensing gyrocompassing m/s
1,757.00	5,489.00	Phoenix MWD Surveys (Wellbore #1 Job #	PHX+MWD+IGRF	PHX+MWD+IGRF v3:standard declination

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)
1,625.99	0.70	23.47	1,625.96	4.19	-0.24	-1.33	0.00	0.00	0.00
Tie-in to Scientific Gyros									
1,757.00	0.80	24.90	1,756.96	5.75	0.46	-1.06	0.08	0.08	1.09
First Phoenix Survey									
1,800.00	0.70	64.70	1,799.96	6.13	0.82	-0.81	1.21	-0.23	92.56
1,843.00	1.70	119.00	1,842.95	5.94	1.62	0.01	3.28	2.33	126.28
1,887.00	2.80	117.40	1,886.91	5.13	3.14	1.69	2.50	2.50	-3.64
1,930.00	4.00	115.70	1,929.84	3.99	5.43	4.19	2.80	2.79	-3.95
1,973.00	5.50	113.20	1,972.69	2.53	8.67	7.71	3.52	3.49	-5.81



Phoenix Technology Services

Survey Report



Company: Merit Energy
Project: Finney County, Kansas (NAD 27)
Site: Tait
Well: A-4
Wellbore: Wellbore #1 Job #1411490
Design: Surveys (Saxon 146)

Local Co-ordinate Reference: Well A-4
TVD Reference: WELL @ 2912.00usft (Saxon 146)
MD Reference: WELL @ 2912.00usft (Saxon 146)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR epdm

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)
2,016.00	7.70	114.80	2,015.40	0.51	13.18	12.59	5.13	5.12	3.72
2,059.00	9.00	112.20	2,057.95	-1.97	18.91	18.77	3.15	3.02	-6.05
2,102.00	9.20	113.90	2,100.40	-4.63	25.17	25.50	0.78	0.47	3.95
2,145.00	9.20	111.70	2,142.85	-7.30	31.51	32.32	0.82	0.00	-5.12
2,189.00	9.50	107.90	2,186.27	-9.71	38.23	39.44	1.56	0.68	-8.64
2,232.00	9.40	108.00	2,228.68	-11.89	44.95	46.49	0.24	-0.23	0.23
2,275.00	9.20	119.00	2,271.12	-14.64	51.29	53.34	4.15	-0.47	25.58
2,318.00	9.00	117.90	2,313.58	-17.88	57.27	59.96	0.62	-0.47	-2.56
2,362.00	8.60	118.20	2,357.06	-21.05	63.21	66.52	0.92	-0.91	0.68
2,405.00	8.20	116.00	2,399.60	-23.91	68.80	72.66	1.19	-0.93	-5.12
2,448.00	7.80	116.10	2,442.18	-26.54	74.18	78.54	0.93	-0.93	0.23
2,491.00	7.70	115.70	2,484.79	-29.07	79.39	84.24	0.26	-0.23	-0.93
2,534.00	8.40	120.20	2,527.37	-31.90	84.71	90.11	2.19	1.63	10.47
2,577.00	8.70	121.20	2,569.89	-35.16	90.20	96.27	0.78	0.70	2.33
2,621.00	10.50	117.20	2,613.27	-38.72	96.61	103.39	4.36	4.09	-9.09
2,664.00	10.80	115.50	2,655.53	-42.25	103.74	111.18	1.01	0.70	-3.95
2,707.00	10.50	116.00	2,697.79	-45.70	110.89	119.00	0.73	-0.70	1.16
2,750.00	10.60	114.20	2,740.06	-49.04	118.02	126.75	0.80	0.23	-4.19
2,793.00	10.50	114.00	2,782.34	-52.25	125.21	134.53	0.25	-0.23	-0.47
2,836.00	10.20	115.10	2,824.64	-55.46	132.24	142.15	0.84	-0.70	2.56
2,880.00	9.90	114.60	2,867.96	-58.69	139.20	149.72	0.71	-0.68	-1.14
2,923.00	9.60	113.60	2,910.34	-61.66	145.85	156.91	0.80	-0.70	-2.33
2,966.00	9.60	114.10	2,952.74	-64.56	152.41	164.00	0.19	0.00	1.16
3,009.00	9.60	113.10	2,995.14	-67.43	158.98	171.10	0.39	0.00	-2.33
3,052.00	10.60	113.50	3,037.47	-70.42	165.90	178.56	2.33	2.33	0.93
3,096.00	10.20	112.40	3,080.75	-73.51	173.22	186.43	1.01	-0.91	-2.50
3,139.00	9.40	111.90	3,123.12	-76.28	180.00	193.70	1.87	-1.86	-1.16
3,182.00	9.50	112.60	3,165.53	-78.95	186.53	200.70	0.35	0.23	1.63
3,225.00	10.50	111.00	3,207.88	-81.72	193.46	208.12	2.41	2.33	-3.72
3,268.00	9.90	110.40	3,250.20	-84.41	200.59	215.70	1.42	-1.40	-1.40
3,312.00	9.60	109.50	3,293.57	-86.95	207.59	223.13	0.76	-0.68	-2.05
3,355.00	9.30	110.00	3,335.98	-89.34	214.24	230.16	0.72	-0.70	1.16
3,398.00	9.10	108.90	3,378.43	-91.63	220.72	237.02	0.62	-0.47	-2.56
3,441.00	10.00	103.50	3,420.83	-93.60	227.57	244.14	2.95	2.09	-12.56
3,484.00	10.50	95.70	3,463.15	-94.86	235.09	251.74	3.43	1.16	-18.14
3,528.00	9.90	95.70	3,506.45	-95.63	242.85	259.43	1.36	-1.36	0.00
3,571.00	9.40	97.80	3,548.84	-96.48	250.00	266.55	1.42	-1.16	4.88
3,614.00	9.10	96.70	3,591.29	-97.35	256.86	273.40	0.81	-0.70	-2.56
3,657.00	10.10	97.30	3,633.68	-98.23	263.98	280.50	2.34	2.33	1.40
3,700.00	10.50	95.60	3,675.99	-99.09	271.62	288.10	1.17	0.93	-3.95
3,744.00	11.50	99.20	3,719.18	-100.18	279.94	296.41	2.76	2.27	8.18
3,787.00	11.40	100.20	3,761.33	-101.62	288.35	304.91	0.52	-0.23	2.33
3,830.00	11.20	99.00	3,803.49	-103.03	296.66	313.29	0.72	-0.47	-2.79



Phoenix Technology Services

Survey Report



Company: Merit Energy
Project: Finney County, Kansas (NAD 27)
Site: Tait
Well: A-4
Wellbore: Wellbore #1 Job #1411490
Design: Surveys (Saxon 146)

Local Co-ordinate Reference: Well A-4
TVD Reference: WELL @ 2912.00usft (Saxon 146)
MD Reference: WELL @ 2912.00usft (Saxon 146)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR epdm

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)
3,873.00	11.40	99.60	3,845.66	-104.39	304.97	321.67	0.54	0.47	1.40
3,916.00	11.40	97.40	3,887.81	-105.64	313.38	330.11	1.01	0.00	-5.12
3,960.00	10.90	102.40	3,930.98	-107.10	321.75	338.58	2.47	-1.14	11.36
4,003.00	11.10	107.60	3,973.19	-109.22	329.67	346.77	2.35	0.47	12.09
4,046.00	11.00	112.20	4,015.40	-112.02	337.41	354.98	2.06	-0.23	10.70
4,089.00	10.60	112.70	4,057.63	-115.10	344.86	362.97	0.96	-0.93	1.16
4,133.00	10.10	112.60	4,100.92	-118.14	352.16	370.81	1.14	-1.14	-0.23
4,176.00	9.80	112.70	4,143.27	-121.00	359.01	378.18	0.70	-0.70	0.23
4,219.00	9.90	110.90	4,185.64	-123.74	365.84	385.49	0.75	0.23	-4.19
4,262.00	10.60	104.70	4,227.95	-126.06	373.12	393.12	3.04	1.63	-14.42
4,305.00	10.60	102.80	4,270.22	-127.94	380.80	401.03	0.81	0.00	-4.42
4,349.00	10.80	103.60	4,313.45	-129.80	388.76	409.19	0.57	0.45	1.82
4,392.00	10.70	102.10	4,355.70	-131.59	396.58	417.20	0.69	-0.23	-3.49
4,435.00	10.40	101.60	4,397.97	-133.21	404.28	425.06	0.73	-0.70	-1.16
4,478.00	10.20	103.50	4,440.28	-134.87	411.78	432.74	0.92	-0.47	4.42
4,521.00	9.70	102.90	4,482.63	-136.57	419.02	440.17	1.19	-1.16	-1.40
4,565.00	9.40	103.00	4,526.02	-138.21	426.13	447.46	0.68	-0.68	0.23
4,608.00	9.80	99.40	4,568.42	-139.60	433.16	454.61	1.68	0.93	-8.37
4,651.00	9.30	99.10	4,610.82	-140.74	440.20	461.71	1.17	-1.16	-0.70
4,694.00	8.60	97.10	4,653.30	-141.69	446.83	468.34	1.78	-1.63	-4.65
4,738.00	9.40	96.50	4,696.76	-142.50	453.66	475.15	1.83	1.82	-1.36
4,781.00	9.10	94.90	4,739.20	-143.19	460.54	481.97	0.92	-0.70	-3.72
4,824.00	10.30	100.20	4,781.58	-144.16	467.71	489.15	3.48	2.79	12.33
4,867.00	9.70	101.40	4,823.93	-145.56	475.04	496.59	1.48	-1.40	2.79
4,910.00	8.50	100.10	4,866.39	-146.83	481.72	503.37	2.83	-2.79	-3.02
4,954.00	7.70	97.40	4,909.95	-147.78	487.85	509.53	2.01	-1.82	-6.14
4,997.00	8.10	98.30	4,952.54	-148.59	493.70	515.39	0.97	0.93	2.09
5,040.00	7.80	97.70	4,995.13	-149.42	499.59	521.29	0.72	-0.70	-1.40
5,083.00	8.20	102.10	5,037.71	-150.45	505.48	527.25	1.70	0.93	10.23
5,126.00	8.10	102.10	5,080.28	-151.73	511.44	533.33	0.23	-0.23	0.00
5,170.00	7.70	102.10	5,123.86	-153.00	517.36	539.37	0.91	-0.91	0.00
5,213.00	7.50	99.40	5,166.48	-154.06	522.94	545.04	0.95	-0.47	-6.28
5,256.00	7.30	99.80	5,209.12	-154.98	528.40	550.55	0.48	-0.47	0.93
5,299.00	7.30	99.10	5,251.77	-155.88	533.79	555.99	0.21	0.00	-1.63
5,342.00	7.20	99.30	5,294.43	-156.75	539.15	561.39	0.24	-0.23	0.47
5,385.00	7.10	99.70	5,337.10	-157.63	544.43	566.71	0.26	-0.23	0.93
5,409.00	6.90	100.10	5,360.92	-158.13	547.31	569.62	0.86	-0.83	1.67
Final Phoenix Survey									
5,489.00	6.90	100.10	5,440.34	-159.82	556.77	579.20	0.00	0.00	0.00
Projection to TD									



MERIT ENERGY COMPANY

Phoenix Technology Services Survey Report



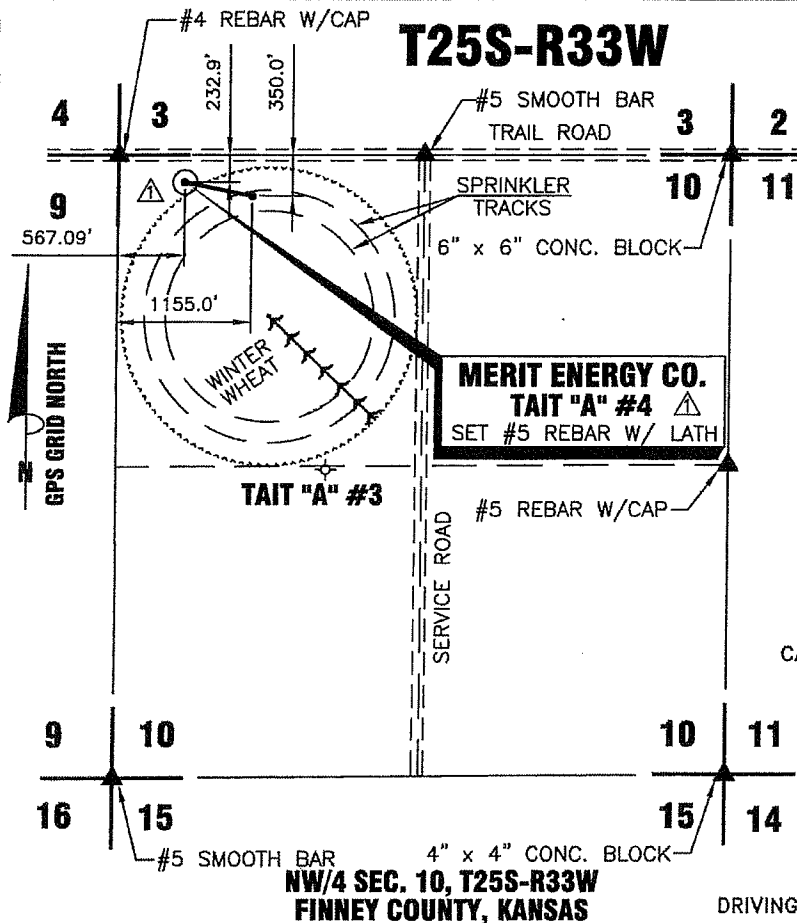
Company:	Merit Energy	Local Co-ordinate Reference:	Well A-4
Project:	Finney County, Kansas (NAD 27)	TVD Reference:	WELL @ 2912.00usft (Saxon 146)
Site:	Tait	MD Reference:	WELL @ 2912.00usft (Saxon 146)
Well:	A-4	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1411490	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Saxon 146)	Database:	Compass 5000 GCR epdm

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
1,625.99	1,625.96	5.75	0.46	Tie-in to Scientific Gyros
1,757.00	1,756.96	-158.13	547.31	First Phoenix Survey
5,409.00	5,360.92	-159.82	556.77	Final Phoenix Survey
5,489.00	5,440.34			Projection to TD

Checked By: _____ Approved By: _____ Date: _____

T25S-R33W



DATE 3/3/2014

OPERATOR △ MERIT ENERGY CO.

WELL NAME TAIT "A" #4

LOCATION NW/4 SEC.10, T25S-R33W

SURFACE HOLE LOCATION

FOOTAGES & △ 232.9' F N L

RELATIONS △ 567.09' F W L

ELEVATION △ 2897.15'

BOTTOM HOLE LOCATION

FOOTAGES & △ 1155.0' F W L

RELATIONS △ 350.0' F N L

CALC. ELEVATION △ N/A

DISTANCE TO EXISTING WELL △ 2749.40' TAIT "A" #3

AUTHORIZED BY IDANIA MEDINA

CROP WINTER WHEAT

SURFACE HOLE LOCATION

LATITUDE 37°54'06.04997" N = 37.901681° N △

LONGITUDE 100°56'09.57391" W = 100.935993° W △

STATE PLANE COORD. X = 1297206.70 △

KANSAS SOUTH ZONE Y = 458867.49 △
NAD 27

BOTTOM HOLE LOCATION

LATITUDE 37°54'04.90350" N = 37.901362° N

LONGITUDE 100°56'02.23694" W = 100.933955° W

STATE PLANE COORD. X = 1297791.52

KANSAS SOUTH ZONE Y = 458736.22
NAD 27

NOTE: CONTRACTOR TO CONTACT ONE CALL @ 1-800-DIG SAFE PRIOR TO ANY EXCAVATION OR CONSTRUCTION.

DRIVING DIRECTIONS USED TO STAKE WELL FROM KNOWN LANDMARK OR CITY FROM:

FROM GIGOT FARMS GATE AT THE CENTER OF SECTION 22 T24S-R33W; THENCE SOUTH 3.6 MILES; THENCE WEST 2061.42 FT. INTO.



Theodore V. Harder
Theodore V. Harder, L.S. No. 1097

<p>13727 NOEL ROAD, SUITE 1200 DALLAS, TEXAS 75240 MAIN PHONE: 972-701-8377 FACSIMILE: 972-701-8381</p>	NO. DWG.	REVISIONS	DATE
	△ DRF	WELL SURFACE RELOC.	6/25/2014
<p>PROPOSED WELL LOCATION OF THE TAIT "A" #4 LOCATED IN THE NW/4 SEC. 10, T25S - R33W FINNEY COUNTY, KANSAS</p>			
SCALE: 1"=1500'	DATE: 3/3/2014		
WORK ORDER NO.:			
DRAWN BY: DRF	CHECKED BY: TVH	APPROVED BY:	AUTHORIZED BY: I. MEDINA

HARDER
AND ASSOCIATES "locating our world"
LAND SURVEYING - GPS SPECIALISTS
P.O. BOX 518 514 MORTON
Elkhart, Kansas 67950
Phone: (620) 697-2696
Fax: (620) 697-4176
E-MAIL: tharder@elkhart.com