

Received
KANSAS CORPORATION COMMISSION
OCT 12 2023
CONSERVATION DIVISION
WICHITA, KS

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Hawkins	)	Docket No.: 23-CONS-3270-CHOR
Oil, LLC, to drill the Marsh #16 well as a	)	
Deviated Wellbore, pursuant to K.A.R. 82-3-103a	)	CONSERVATION DIVISION
To be located in Section 6, Township 26 South,	)	
Range 5 East, Butler County, Kansas.	)	License No.: 32693

Amended Application

COMES NOW, Hawkins Oil, LLC ("Hawkins"), and for its Application for Deviated Wellbore ("Application") pursuant to K.A.R. 82-3-103a requests an order authorizing the drilling of the Marsh 16 well as a deviated wellbore to be located in Butler County, Kansas. In support of its Application, Hawkins states as follows:

1. Applicant is a limited liability company, with its principal place of business at 427 S. Boston Ave., Suite 915, Tulsa, Oklahoma, 74103. The Applicant holds Kansas Corporation operator's license number 32693.

2. Hawkins Oil, LLC oil and gas operator's License No. 32693 is valid until August 30th, 2024.

3. Hawkins owns and operates the Marsh Lease, a valid lease, in Section 6, Township 26 South, Range 5 East, Butler County, Kansas (subject "Lease"), and proposes to drill its Marsh #16 Horizontal Well as a well deviated more than 7° to be completed in the Arbuckle formation, for the production of oil and gas.

4. Applicant proposes to spud the Marsh #16 well at a surface location 2047 feet from the North line and 1145 feet from the East line of Section 6, Township 26 South, Range 5 East, Butler County, Kansas.

5. From the surface location described above, Hawkins proposes to drill the Marsh #16 to test the Arbuckle formation to a total depth of approximately 2681.08 feet TVD. The bottom of the hole will be located 2886 from the South line and 2060 from the East line in Section 6, Township 26 South, Range 5 East, Butler County, Kansas in the El Dorado field.

6. Hawkeye Directional, LLC ("Hawkeye") and Hawkins have designed the Subject Well so that it will deviate Southwesterly 3° at 600 feet, increasing to 26.36° at 1378.62 feet and maintaining a deviation of 26.36° to a total depth of 2681.08 feet. Hawkins intends to produce from the Arbuckle formation. The anticipated top of the Arbuckle formation is 2550 feet. If completed, the Subject Well will have a string of casing from surface to the Arbuckle formation to be a perforated completion interval in the producing zone.

7. Drilling the proposed well pursuant to K.S.A. 82-3-103a will prevent economic waste and prevent disruption in a housing addition located near the production zone. As depicted on Exhibit "A", Hawkins surface operations can be conducted outside the radius of the housing addition. Attached to Exhibit "A" is an area map. Hawkin's geologists have determined that drilling the subject well into the Arbuckle formation is necessary to maximize the recovery of oil and gas reserves from the target reservoir, therefore preventing waste and disruption to the housing addition.

8. The correlative rights of the offset operators, lessees, and mineral owners will not be violated if this application is granted. Exhibit "B" is an Order granting the application for a well location exception for the Marsh #16 docket number 23-CONS-3126-CWLE dated February 9, 2023.

9. Hawkins requests that Commission assign the subject well a full production

allowable.

10. The subject well will be drilled, operated, and produced in compliance with the Commission's Rules and Regulations for the production of oil and gas from deviated wellbores. The granting of this application will not cause waste or violate the correlative rights of any party. The drilling of the subject well is necessary to produce hydrocarbon reserves from the Arbuckle formation underlying the subject lease.

11. Concurrent with the filing of its application, the applicant has mailed in the United States mail, postage paid, a copy of the application as required by K.A.R. 82-3-135a(b) to each operator or lessor of record and each unleased mineral owner within one-half mile of the proposed surface well site of the Marsh #16 in Section 6, Township 26 South, Range 5 East, Butler County, Kansas. A list of those individuals and the offset operator's map is attached hereto as Exhibit "C".

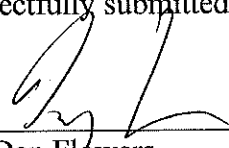
12. Upon the filing of this application, applicant will proceed to publish its notice of its application as required by K.A.R. 82-3-135a(d) in the Butler County Times-Gazette, published in Butler County, Kansas, and the Wichita Eagle, published in Wichita, Kansas. Upon completion of the publications, applicant will provide proof of the same to the Commission staff.

13. Attached hereto as Exhibit "D" is a plat demonstrating the surface and bottom hole locations, a plot map describing the drilling direction and inclination, a standard planning report geographic, and standard planning report for the Marsh #16 in Section 6, Township 26 South, Range 5 East, Butler County, Kansas. Exhibit "D" attachments are provided by Hawkeye Directional, LLC.

14. Applicant proposes to use C & G Drilling and Hawkeye Directional, LLC as the drilling contractors.

WHEREFORE, Hawkins asks that this application be docketed by the Commission and if no valid protests are timely received by the Commission, that the Commission grant Hawkins' application to drill the subject well as a deviated wellbore and assign it a full production allowable without incurring the time and expense of an evidentiary hearing. In the event a valid protest is timely filed, Hawkins requests that the Commission set this application for hearing and upon such hearing, grant the requested order, and for such other and further relief as the Commission deems necessary and proper.

Respectfully submitted,

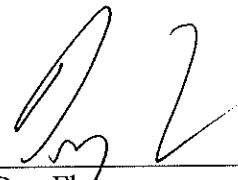
By: 

Dan Flowers
Hawkins Oil, LLC
427 S. Boston Ave, Ste 915
Tulsa, Oklahoma 74103
sonomare@outlook.com
316-208-7590

VERIFICATION

STATE OF KANSAS)
) ss:
COUNTY OF SEDGWICK)

I, Dan Flowers, of lawful age, being duly sworn, state: I am a representative of Hawkins Oil, LLC, Applicant in the above captioned matter, and that I have read the above Application, know its contents and that the statements made therein are true and correct to the best of my knowledge and belief.



Dan Flowers

SUBSCRIBED AND SWORN to before me this 11th day of October, 2023.



Charlett M Barker
Notary Public

CERTIFICATE OF SERVICE

23-CONS-3270-CHOR

I, the undersigned, certify that a true copy of the attached Amended Application has been served by means of first class mail and electronic service on 10-12, 2023:

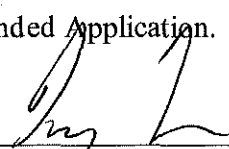
J. Hunt Hawkins
Hawkins Oil, LLC
427 S Boston Ave, Suite 915
Tulsa, OK 74103-4114
Hunt.hawkins@gmail.com

Jake Eastes, Geologist Specialist
Kansas Corporation Commission
266 N. Main St., Ste. 220
Wichita, Kansas 67202-1513
j.eastes@kcc.ks.gov

Kelcey Marsh, Litigation Counsel
Kansas Corporation Commission
Central Office
266 N. Main St., Ste. 220
Wichita, Kansas 67202-1513
k.marsh@kcc.ks.gov

Jonathan R. Myers, Assistant General Counsel
Kansa Corporation Commission
266 N. Main St., Ste. 220
Wichita, Kansas 67202-1513
j.myers@kcc.ks.gov

And those people shown on Exhibit C attached to Amended Application.



Dan Flowers

EXHIBIT "A"

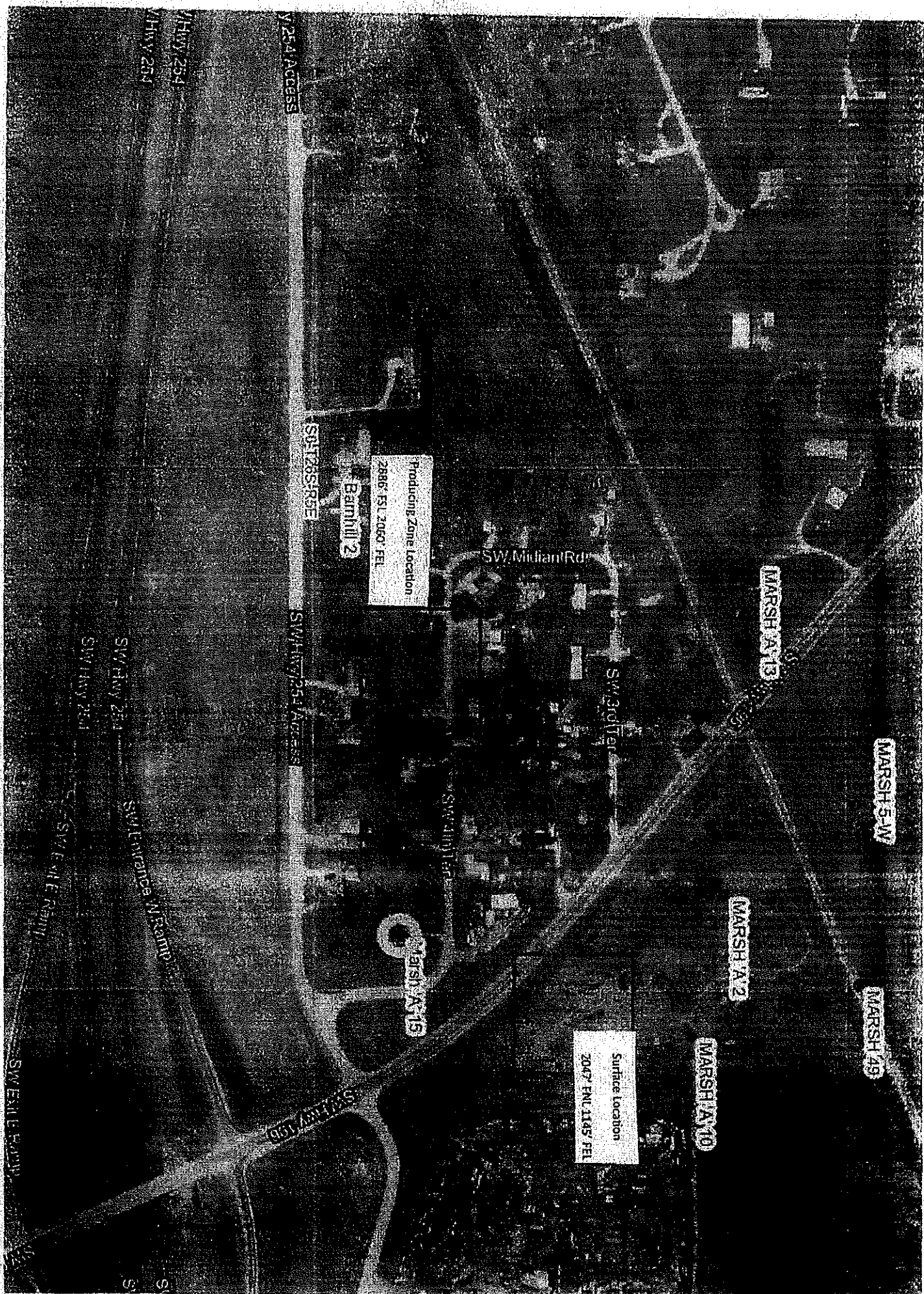


EXHIBIT "B"

**THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

Before Commissioners: Susan K. Duffy, Chair
Dwight D. Keen
Andrew J. French

In the matter of the Application of Hawkins) Docket No. 23-CONS-3126-CWLE
Oil, LLC for a well location exception for its)
Marsh #16 well, to be located in the SE/4) CONSERVATION DIVISION
SW/4 NE/4 of Section 6, Township 26 South,)
Rango SE, Butler County Kansas.) License No. 32693

ORDER GRANTING APPLICATION

The Commission rules as follows:

I. JURISDICTION

1. K.S.A. 74-623 provides the Commission exclusive jurisdiction and authority to regulate oil and gas activities in Kansas.

2. K.A.R. 82-3-108(a) provides that the setback requirement for oil and gas wells shall be 330 feet from any lease or unit boundary line, except as provided in subsection (b) or (c).

3. K.A.R. 82-3-108(b) provides that an oil well drilled to a total depth of less than 2,000 feet in any of the following counties in eastern Kansas shall be subject to a setback of 165 feet from any lease or unit boundary: Allen, Anderson, Atchison, Bourbon, Brown, Cherokee, Coffey, Crawford, Douglas, Elk, Franklin, Greenwood, Jackson, Jefferson, Johnson, Labette, Leavenworth, Linn, Lyon, Miami, Montgomery, Neosho, Osage, Shawnee, Wilson, Woodson, and Wyandotte. Further, wells drilled to a total depth of less than 2,500 feet in Chautauqua County are subject to the 165-foot setback.

4. K.A.R. 82-3-108(c) provides that the Commission may grant an exception to well setback requirements, and adjust assigned allowables, if necessary either to prevent waste or protect correlative rights.

5. K.A.R. 82-3-207 provides that a standard oil-well drilling unit shall be 10 acres, except that the standard drilling unit for counties and well depths listed in K.A.R. 82-3-108(b) shall be 2.5 acres.

II. FINDINGS OF FACT

6. On November 3, 2022, Hawkins Oil, LLC (Operator) filed an Application requesting a well location exception and full allowable for its proposed Marsh #16 oil well (Subject Well). Operator intends to drill the Subject Well at a surface location 2,886 feet from the South line and 2,060 feet from the East line of Section 6, Township 26 South, Range 5 East in Butler County, Kansas.¹ The Subject Well's location will be less than 330 feet from the south boundary line of its oil and gas lease.²

7. Operator requests an exception pursuant to K.A.R. 82-3-108(c).³ Operator seeks a well location exception for the Subject Well because the Subject Well will be drilled less than 330 feet from the nearest lease or unit boundary.⁴ Operator alleges the proposed location is necessary as certain man-made structures interfere with the selection of drill sites for the Subject Well.⁵ Operator also posits that the well location exception is necessary to prevent waste and protect correlative rights.⁶

8. Operator served and published notice at least 15 days before the issuance of this Order, as required under K.A.R. 82-3-108(f) and K.A.R. 82-3-135a(d).⁷ No protest was filed under K.A.R. 82-3-135b.

¹ See Application – Hawkins Oil, ¶ 4 (Nov. 3, 2022).

² *Id.* at ¶ 7.

³ *Id.* at ¶ 10.

⁴ *Id.* at ¶ 7.

⁵ See *Id.* at ¶ 11.

⁶ *Id.*

⁷ Operator's published notices provided an inaccurate docket number, but the Commission finds the notices were sufficiently detailed to put interested persons on notice. See Affidavit of Publication – Wichita Eagle and Affidavit of Publication – The Butler Times-Gazette (both filed Dec. 30, 2022).

9. Commission Staff recommends that Operator's Application be granted. Further, Commission Staff believes the drilling of the Subject Well will prevent waste, protect correlative rights, and that granting Operator's application raises no pollution issues.

III. CONCLUSIONS OF LAW

10. The Commission has jurisdiction over Operator and this matter.

11. Operator's Application was filed in accordance with the rules and regulations of the Commission and in accordance with Kansas statutes.

12. Notice was properly served and published. No protest was filed.

13. Operator's Application should be granted to prevent waste. Operator's Application appears protective of correlative rights, and raises no apparent pollution issues.

THEREFORE, THE COMMISSION ORDERS:

A. Operator's Application for a well location exception for the Subject Well under K.A.R. 82-3-108 is granted. The Subject Well is assigned a full allowable. The Subject Well shall have a standard drilling unit, except that the acreage of the drilling unit shall be reduced along the southern side to match the production unit boundary line.⁸

B. Operator's Application is being granted via summary proceeding; thus, this Order does not take effect until after the time for requesting a hearing has expired.⁹ Any party may request a hearing on the above issues by submitting a written request setting forth the specific grounds upon which relief is sought, to the Commission at 266 N. Main, Suite 220, Wichita, Kansas 67202, within 15 days from the date of service of this Order.¹⁰ If a hearing is not requested, then this Order shall become effective upon expiration of the time for requesting hearing.¹¹

⁸ Application, ¶ 5, 6, and 11.

⁹ See K.S.A. 77-537.

¹⁰ See K.S.A. 77-542.

¹¹ See K.S.A. 77-537.

C. If this Order becomes effective, then any party may file and serve a petition for reconsideration pursuant to the requirements and time limits established by K.S.A. 77-529(a)(1).¹²

BY THE COMMISSION IT IS SO ORDERED.

Duffy, Chair; Keen, Commissioner; French, Commissioner.

Dated: 02/09/2023



Lynn M. Retz
Executive Secretary

Mailed Date: 02/29/2023

KAM

¹² See K.S.A. 55-606; K.S.A. 77-503(c); K.S.A. 77-531(b).

CERTIFICATE OF SERVICE

23-CONS-3128-CWLE

I, the undersigned, certify that a true copy of the attached Order has been served to the following by means of first class mail and electronic service on 02/09/2023.

**JAKE EASTES, GEOLOGIST SPECIALIST
KANSAS CORPORATION COMMISSION
288 N. Main St., Ste. 220
WICHITA, KS 67202-1813
j.eastes@kcc.ks.gov**

**J. HUNT HAWKINS
HAWKINS OIL, LLC
427 S BOSTON AVE STE 915
TULSA, OK 74103-4114**

**KELCEY MARSH, LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
CENTRAL OFFICE
288 N. MAIN ST, STE 220
WICHITA, KS 67202-1813
k.marsh@kcc.ks.gov**

**/s/ KCC Docket Room
KCC Docket Room**

Exhibit "C"

KANSAS GAS & ELECTRIC CO

Mailing Address: ATTN: EVERGY PO BOX 418679 KANSAS CITY, MO
64141-9679

Tract Description: S06, T26, R05E, ACRES 62.9, NE4 N RR & NE HWY
196 EXC W760 N300 LESS ROW

Situs Address: 4363 SW PARALLEL ST El Dorado 67042

Owner: HALE, MARCELLA LYNN; TOD

Mailing Address: 1567 CRYSTAL PASS ALLEN, TX 75002-0973

Tract Description: S06, T26, R05E, ACRES 40.2, NE4 LYC NE HWY 196
& SE RR EXC BEG S00W & 175N SE/C N440 W320 S310 SELV340 TO POB
(SCALED)

Owner: JAAX, BOBBIE M; REV TRUST

Mailing Address: 3497 NW HWY 196 EL DORADO, KS 67042-8328

Tract Description: S06, T26, R05E, ACRES 206.9, SW/4; W1570 SE/4;
E1092.7 S985.3 SE/4 EXC S211.5 E391 LESS ROW (SCALED)

Situs Address: 04498 SW 10TH ST

Owner: BURKHOLDER, STEPHEN; REV TR

Mailing Address: 4106 W CENTRAL AVE EL DORADO, KS 67042-3441

Tract Description: S06, T26, R05E, ACRES 2.8, BEG S00W & 175N
SE/C NE4 N440 W320 S310 SELV340 TO POB (SCALED)

Situs Address: 04106 W CENTRAL AVE El Dorado 67042

Vess Oil Corporation

Field Name: El Dorado

Location: T26S R5E Sec 6, NE SE NE SW

Mailing Address: 1700 Waterfront #500
Wichita, Kansas 67206

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

Kansas City, MO 64141

Certified Mail Fee

\$4.35

\$

Extra Services & Fees (check box, add fee as appropriate)

- | | | |
|--|----|-------------------|
| ☐ Return Receipt (hardcopy) | \$ | \$0.00 |
| ☐ Return Receipt (electronic) | \$ | \$0.00 |
| ☐ Certified Mail Restricted Delivery | \$ | \$0.00 |
| ☐ Adult Signature Required | \$ | \$0.00 |
| ☐ Adult Signature Restricted Delivery | \$ | \$0.00 |

Postage

\$2.31

\$

Total Postage and Fees

\$6.66

\$

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

Kansas Gas & Electric
Energy P.O. Box 418679
Kansas City, MO 64141



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

Wichita, KS 67206

Certified Mail Fee

\$ 14.35

Extra Services & Fees (check box, add fee as appropriate)

- | | |
|--|---------|
| ☐ Return Receipt (hardcopy) | \$ 0.00 |
| ☐ Return Receipt (electronic) | \$ 0.00 |
| ☐ Certified Mail Restricted Delivery | \$ 0.00 |
| ☐ Adult Signature Required | \$ 0.00 |
| ☐ Adult Signature Restricted Delivery | \$ 0.00 |

Postage

\$ 2.31

Total Postage and Fees

\$ 6.66

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

Vess Oil Corporation
1740 Waterfront #500
Wichita, KS 67206

Postmark
Here

OCT 12 2023
10/12/2023

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

Allen, TX 75002

Certified Mail Fee

\$

\$4.35

Extra Services & Fees (check box, add fee as appropriate)

- | | | |
|--|----|--------|
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| ☐ Return Receipt (electronic) | \$ | \$0.00 |
| ☐ Certified Mail Restricted Delivery | \$ | \$0.00 |
| ☐ Adult Signature Required | \$ | \$0.00 |
| ☐ Adult Signature Restricted Delivery | \$ | \$0.00 |

Postage

\$

\$2.31

Total Postage and Fees

\$

\$6.66

Postmark
Here

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

E1 Dorado, KS 67042

Certified Mail Fee

\$4.35

Extra Services & Fees (check box, add fee as appropriate)

- | | | |
|--|----|--------|
| ☐ Return Receipt (hardcopy) | \$ | \$0.00 |
| ☐ Return Receipt (electronic) | \$ | \$0.00 |
| ☐ Certified Mail Restricted Delivery | \$ | \$0.00 |
| ☐ Adult Signature Required | \$ | \$0.00 |
| ☐ Adult Signature Restricted Delivery | \$ | \$0.00 |

Postage

\$2.31

Total Postage and Fees

\$6.66

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

Buricholder, Stephen, Civ TR
4106 W Central Ave
E1 Dorado, KS 67042

Postmark
Here

10/12/2023

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

El Dorado, KS 67042

Certified Mail Fee \$4.35

\$

\$0.00

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)

\$

\$0.00

☐ Return Receipt (electronic)

\$

\$0.00

☐ Certified Mail Restricted Delivery

\$

\$0.00

☐ Adult Signature Required

\$

\$0.00

☐ Adult Signature Restricted Delivery

\$

\$0.00

Postage \$2.31

\$

Total Postage and Fees

\$6.66

\$

Sent To

Street and Apt. No., or PO Box No.

City, State, ZIP+4®

Postmark

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OCT 12 2023

10/12/2023

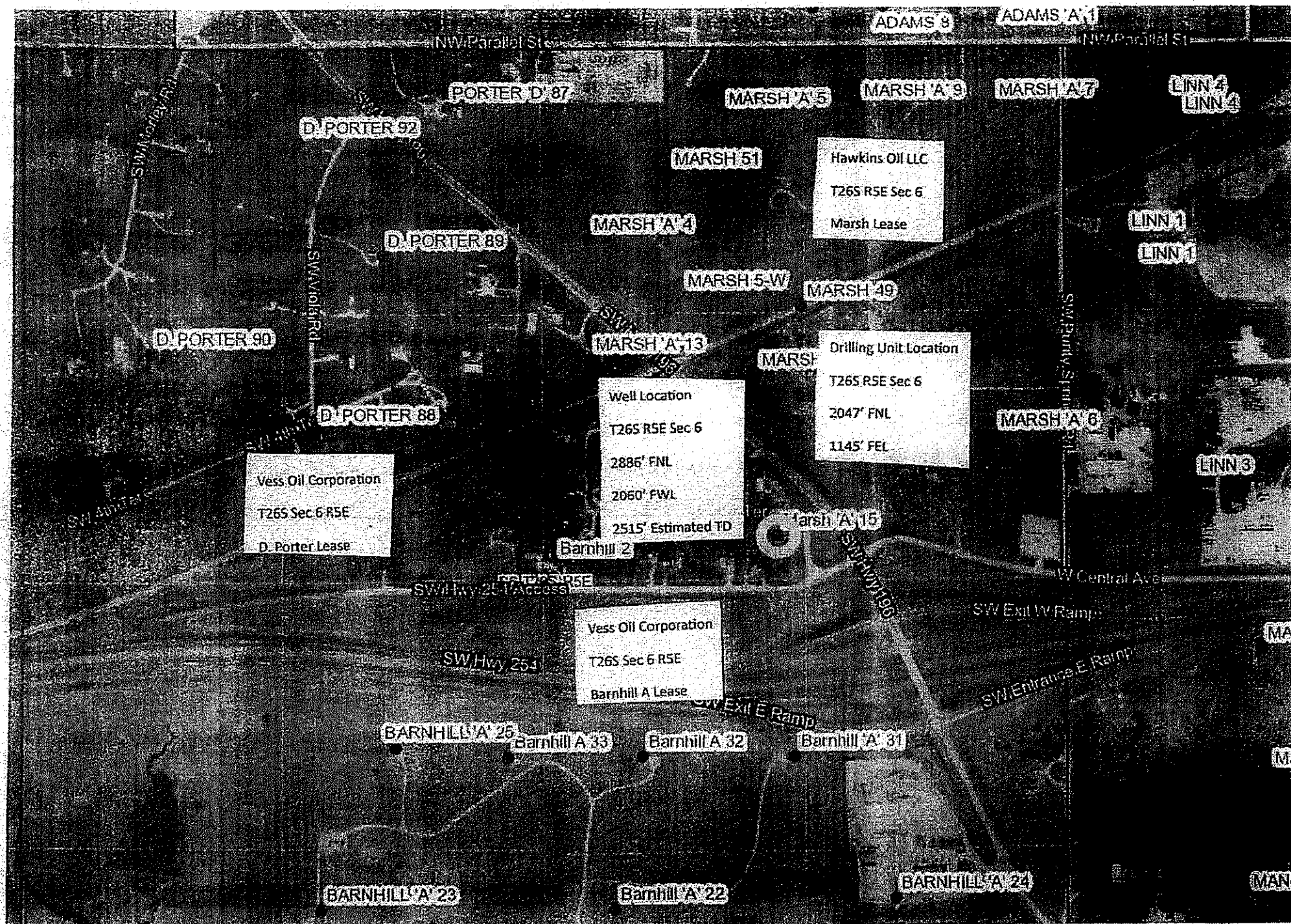


Exhibit "D"

Hawkins Oil, LLC

PROJECT DETAILS: Butler County, KS

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Kansas North 1501
North Reference: Grid
System Datum: Mean Sea Level

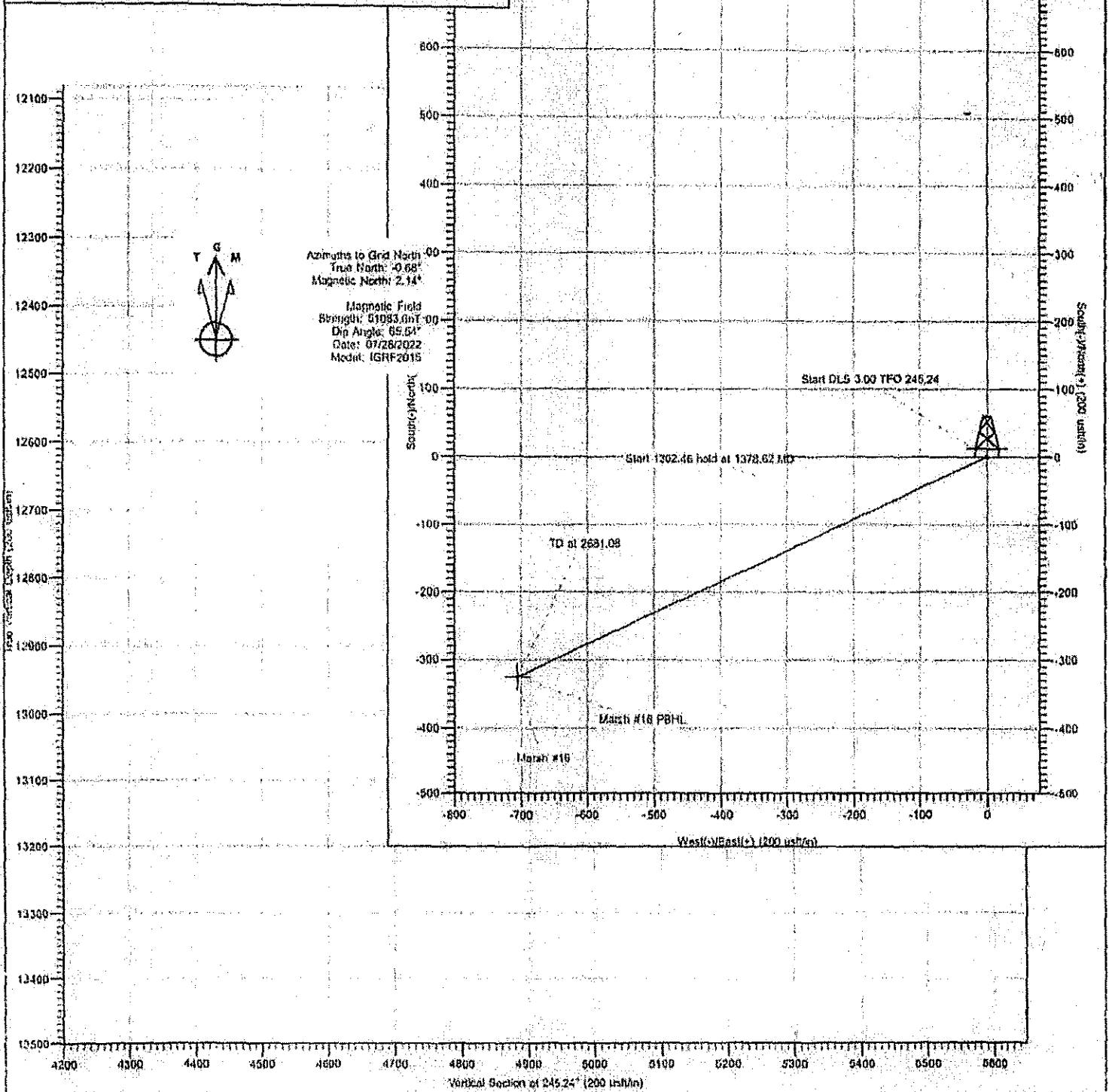
To convert a True Direction to a Grid Direction, Subtract 0.68°
To convert a Magnetic Direction to a True Direction, Add 2.82° East
To convert a Magnetic Direction to a Grid Direction, Add 2.14°

Project: Butler County, KS
Site: SEC 6 - T26S - R5E
Well: Marsh #16
Wellbore: OH
Design: Plan #1



WELL DETAILS: Marsh #16

GL 1405' 10" KB @ 1421.00ush
Northing: 185251.51 Easting: 2311643.38 Latitude: 37° 48' 10.600 N Longitude: 96° 55' 17.200 W
+N-S: 0.00 +E-W: 0.00



Hawkins Oil, LLC

Project: Butler County, KS
 Site: SEC 6 - T26S - R5E
 Well: Marsh #16
 Wellbore: OH
 Design: Plan #1



PROJECT DETAILS: Butler County, KS

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: Kansas North 1601
 North Reference: Grid
 System Datum: Mean Sea Level

To convert a True Direction to a Grid Direction, Subtract 0.68°
 To convert a Magnetic Direction to a True Direction, Add 2.82° East
 To convert a Magnetic Direction to a Grid Direction, Add 2.14°

WELL DETAILS: Marsh #16

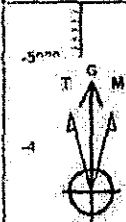
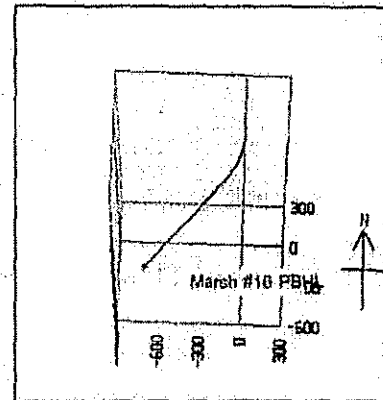
GL 1405' ± 16' KB @ 1421.00ust
 +N-S +E-W Northing Easting Latitude Longitude
 0.00 0.00 -185261.54 2311043.36 37° 49' 10.600 N 96° 55' 17.200 W

SECTION DETAILS

Sec	MD	Inc	As	TVD	+N-S	+E-W	Diag	TFace	VSed
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00
3	1378.62	26.36	245.24	1347.95	-93.16	-180.31	3.00	245.24	198.56
4	2681.08	26.36	245.24	2515.00	-325.34	-705.43	0.00	0.00	776.84

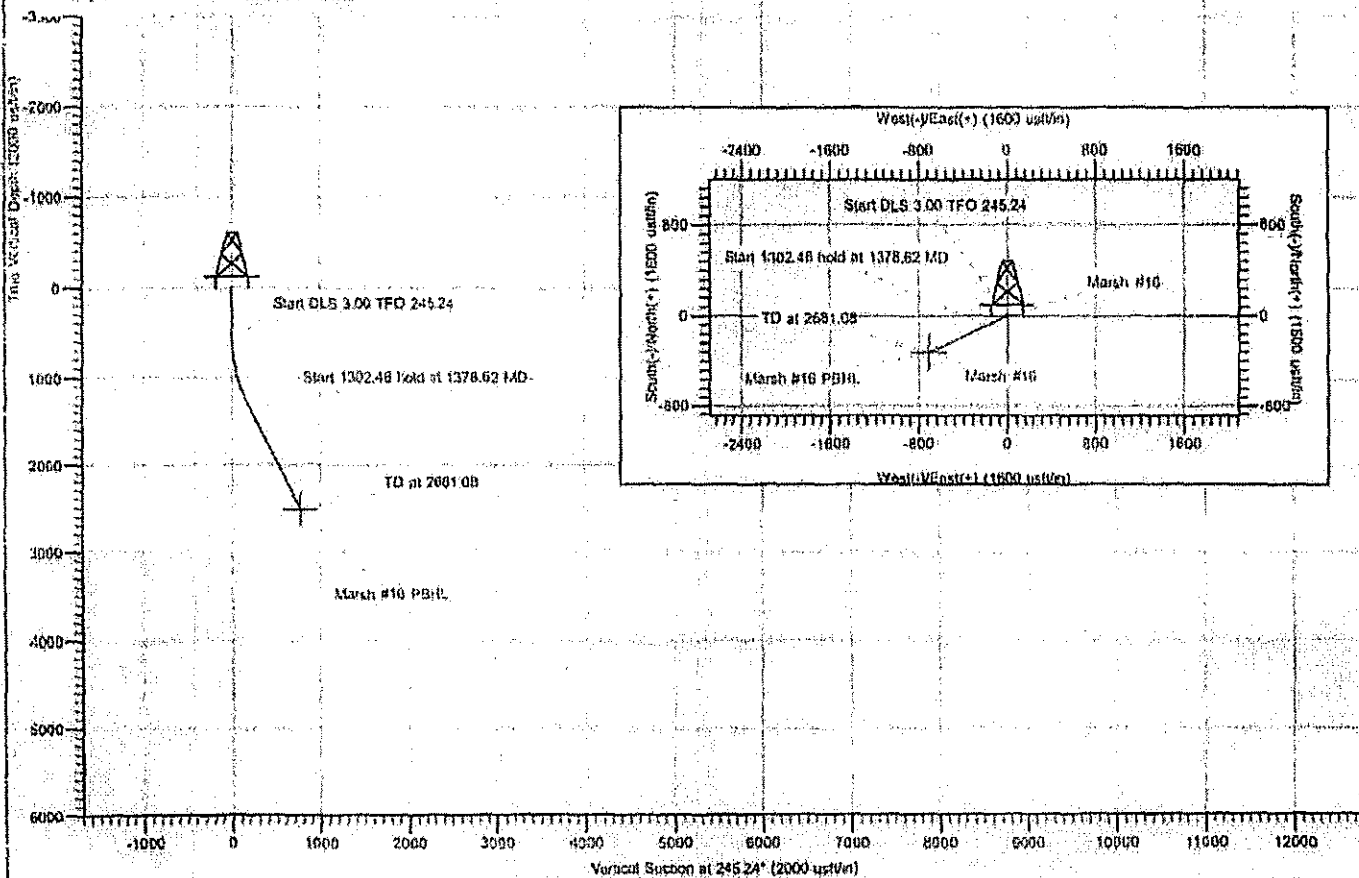
DESIGN TARGET DETAILS

Name: Marsh #16 PPHL TVD: 2515.00 +N-S: -325.34 +E-W: -705.43 Northing: -105570.07 Easting: 2310937.95 Latitude: 37° 49' 7.168 N Longitude: 96° 55' 26.036 W



Azimuths to Grid North
 True North: 0.68°
 Magnetic North: 2.14°

Magnetic Field
 Strength: 61083.6nT
 Dip Angle: 65.54°
 Date: 07/28/2022
 Model: IGRF2015



Hawkins Oil, LLC

Butler County, KS
SEC 6 - T26S - R5E
Marsh #16

OH

Plan: Plan #1

Standard Planning Report - Geographic

28 July, 2022



Hawkeye Directional, LLC

Planning Report - Geographic

Database:	HED Compass_DSN	Local Co-ordinate Reference:	Well March #16
Company:	Hawkins Oil, LLC	TVD Reference:	GL 1405' + 16' KB @ 1421.00usft
Project:	Butler County, KS	MD Reference:	GL 1405' + 16' KB @ 1421.00usft
Site:	SEC 6 - T26S - R5E	North Reference:	Grid
Well:	Marsh #16	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project:	Butler County, KS		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Kansas North 1501		

Site:	SEC 6 - T26S - R5E		
Site Position:		Northing:	-185,251.54 usft
From:	Lat/Long	Eastng:	2,311,643.39 usft
Position Uncertainty:	0.00 usft	Grid Radius:	13,200 in
		Grid Convergence:	0.60 °

Well:	Marsh #16		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Eastng:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:

Wellbore:	OH
-----------	----

Magnetic	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (G)
	IGRF2015	07/28/22	2.82	85.54	51,083.58419067

Design:	Plan #1
Audit Notes:	
Version:	Phase: PLAN
	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)
	(usft)
	0.00

Plan Survey Tool Program	Date 07/28/22
Depth From (usft)	Depth To (usft)
1	0.00
2,681.08	Plan #1 (OH)
	MWD
	OWSG MWD - Standard

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
1,378.82	26.36	245.24	1,347.95	-83.16	-180.31	3.00	3.00	-13.05	245.24	
2,681.08	20.36	245.24	2,515.00	-325.34	-705.43	0.00	0.00	0.00	0.00	0.00 Marsh #16 PBHL

Hawkeye Directional, LLC

Planning Report - Geographic



Database:	HED_Compass_DSN	Local Coordinate Reference:	Well Marsh #16
Company:	Hawkins Oil, LLC	TVD Reference:	GL 1405' + 18' KB @ 1421.00usft
Project:	Buller County, KS	MD Reference:	GL 1405' + 18' KB @ 1421.00usft
Site:	SEC 6 - T26S - R5E	North Reference:	Grid
Well:	Marsh #16	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Eastng (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	-185,251.54	2,311,643.39	37° 49' 10.600 N	96° 55' 17.200 W	
100.00	0.00	0.00	100.00	0.00	0.00	-185,251.54	2,311,643.39	37° 49' 10.600 N	96° 55' 17.200 W	
200.00	0.00	0.00	200.00	0.00	0.00	-185,251.54	2,311,643.39	37° 49' 10.600 N	96° 55' 17.200 W	
300.00	0.00	0.00	300.00	0.00	0.00	-185,251.54	2,311,643.39	37° 49' 10.600 N	96° 55' 17.200 W	
400.00	0.00	0.00	400.00	0.00	0.00	-185,251.54	2,311,643.39	37° 49' 10.600 N	96° 55' 17.200 W	
500.00	0.00	0.00	500.00	0.00	0.00	-185,251.54	2,311,643.39	37° 49' 10.600 N	96° 55' 17.200 W	
Start DLS 3.00 TFO 245.24										
600.00	3.00	245.24	599.95	-1.10	-2.38	-185,262.64	2,311,641.01	37° 49' 10.589 N	96° 55' 17.230 W	
700.00	6.00	245.24	609.63	-1.38	-9.50	-185,255.92	2,311,633.86	37° 49' 10.558 N	96° 55' 17.310 W	
800.00	9.00	245.24	708.77	-9.85	-21.35	-185,281.39	2,311,622.03	37° 49' 10.505 N	96° 55' 17.467 W	
900.00	12.00	245.24	897.08	-17.48	-37.90	-185,289.02	2,311,605.49	37° 49' 10.432 N	96° 55' 17.675 W	
1,000.00	15.00	245.24	994.31	-27.25	-59.10	-185,278.80	2,311,584.29	37° 49' 10.338 N	96° 55' 17.940 W	
1,100.00	18.00	245.24	1,090.18	-39.15	-04.86	-185,290.69	2,311,568.50	37° 49' 10.223 N	96° 55' 18.263 W	
1,200.00	21.00	245.24	1,184.43	-53.13	-115.19	-185,304.67	2,311,528.19	37° 49' 10.088 N	96° 55' 18.643 W	
1,300.00	24.00	245.24	1,278.81	-69.15	-149.94	-185,320.69	2,311,493.45	37° 49' 9.934 N	96° 55' 19.078 W	
1,378.62	26.36	245.24	1,347.95	-83.16	-180.31	-185,334.70	2,311,463.07	37° 49' 9.799 N	96° 55' 19.459 W	
Start 1302.49 hold at 1378.62 MD										
1,400.00	26.36	245.24	1,367.11	-87.13	-188.83	-185,338.67	2,311,454.45	37° 49' 9.761 N	96° 55' 19.567 W	
1,500.00	26.36	245.24	1,456.71	-105.73	-229.25	-185,357.27	2,311,414.14	37° 49' 9.582 N	96° 55' 20.072 W	
1,600.00	26.36	245.24	1,546.32	-124.32	-289.57	-185,375.86	2,311,373.82	37° 49' 9.403 N	96° 55' 20.577 W	
1,700.00	26.36	245.24	1,635.92	-142.92	-309.88	-185,394.46	2,311,333.50	37° 49' 9.224 N	96° 55' 21.082 W	
1,800.00	26.36	245.24	1,725.52	-161.51	-350.20	-185,413.05	2,311,293.18	37° 49' 9.045 N	96° 55' 21.587 W	
1,900.00	26.36	245.24	1,815.13	-180.10	-390.52	-185,431.64	2,311,252.87	37° 49' 8.866 N	96° 55' 22.092 W	
2,000.00	26.36	245.24	1,904.73	-198.70	-430.84	-185,450.24	2,311,212.55	37° 49' 8.687 N	96° 55' 22.597 W	
2,100.00	26.36	245.24	1,994.33	-217.29	-471.15	-185,468.83	2,311,172.23	37° 49' 8.508 N	96° 55' 23.102 W	
2,200.00	26.36	245.24	2,083.94	-235.89	-511.47	-185,487.43	2,311,131.91	37° 49' 8.329 N	96° 55' 23.607 W	
2,300.00	26.36	245.24	2,173.54	-254.48	-551.79	-185,506.02	2,311,091.60	37° 49' 8.150 N	96° 55' 24.112 W	
2,400.00	26.36	245.24	2,263.14	-273.07	-592.11	-185,524.62	2,311,051.28	37° 49' 7.971 N	96° 55' 24.617 W	
2,500.00	26.36	245.24	2,352.75	-291.67	-632.43	-185,543.21	2,311,010.96	37° 49' 7.792 N	96° 55' 25.122 W	
2,600.00	26.36	245.24	2,442.35	-310.26	-672.74	-185,561.80	2,310,970.64	37° 49' 7.613 N	96° 55' 25.627 W	
2,681.08	26.36	245.24	2,518.00	-325.34	-705.43	-185,576.88	2,310,937.95	37° 49' 7.468 N	96° 55' 26.036 W	
TD at 2681.08										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Eastng (usft)	Latitude	Longitude	
Marsh #16 PBHL	0.00	0.00	2,515.00	-325.34	-705.43	-185,576.88	2,310,937.95	37° 49' 7.468 N	96° 55' 26.036 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N-S (usft)	+E-W (usft)		
500.00	500.00	0.00	0.00	Start DLS 3.00 TFO 245.24	
1,378.62	1,347.95	-83.16	-180.31	Start 1302.49 hold at 1378.62 MD	
2,681.08	2,515.00	-325.34	-705.43	TD at 2681.08	