

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Mack Energy Corporation P.O. Box 960 Artesia, NM 88210		² OGRID Number 013837
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30 - 0 05-64322	⁵ Pool Name Round Tank; San Andres	
⁶ Pool Code 52770		
⁷ Property Code 314852	⁸ Property Name Yellowknife Federal	⁹ Well Number 2H

II. ¹⁰ Surface Location

UL or lot no. M	Section 21	Township 15S	Range 29E	Lot Idn	Feet from the 565	North/South Line South	Feet from the 355	East/West line West	County Chaves
--------------------	---------------	-----------------	--------------	---------	----------------------	---------------------------	----------------------	------------------------	------------------

¹¹ Bottom Hole Location

UL or lot no. M	Section 28	Township 15S	Range 29E	Lot Idn	Feet from the 12	North/South line South	Feet from the 353	East/West line West	County Chaves
¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 5/14/2022	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
278471	Holly Marketing & Refining Co LLC P.O. Box 1600 Artesia, NM 88211-1600	O
036788	DCP Midstream 4001 Penbrook Odessa, TX 79762	G

IV. Well Completion Data

²¹ Spud Date 1/31/2022	²² Ready Date 4/22/2022	²³ TD 8746'	²⁴ PBDT 8696'	²⁵ Perforations 3624-8656'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17 1/2"		13 3/8"	252'		340sx
12 1/4"		9 5/8"	1209'		420sx
8 3/4"		7" & 5 1/2"	8746'		1850sx
		3 1/2" (tubing)	2411'		

V. Well Test Data

³¹ Date New Oil 5/14/2022	³² Gas Delivery Date 5/14/2022	³³ Test Date 5/15/2022	³⁴ Test Length 24hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil 21	³⁹ Water 1431	⁴⁰ Gas 6		⁴¹ Test Method Pumping
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Deana Weaver</i>			OIL CONSERVATION DIVISION		
Printed name: Deana Weaver			Approved by: John Garcia		
Title: Regulatory Technician II			Title:		
E-mail Address: dweaver@mec.com			Approval Date: 9/16/2022		
Date: 5/16/2022		Phone: 575-748-1288			

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-005-64322	² Pool Code 52770	³ Pool Name Round Tank; San Andres
⁴ Property Code 314852	⁵ Property Name YELLOWKNIFE FEDERAL	⁶ Well Number 2H
⁷ OGRID No. 13837	⁸ Operator Name MACK ENERGY CORPORATION	⁹ Elevation 3798.3

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	15 S	29 E		565	SOUTH	355	WEST	CHAVES

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	15 S	29 E		12	SOUTH	353	WEST	CHAVES
¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NW CORNER SEC. 21 LAT. = 33.0086670°N LONG. = 104.0420158°W NMSP EAST (FT) N = 730813.44 E = 630640.06 W Q CORNER SEC. 21 LAT. = 33.0014268°N LONG. = 104.0422246°W NMSP EAST (FT) N = 728179.05 E = 630583.33 NW CORNER SEC. 28 LAT. = 32.9941741°N LONG. = 104.0419921°W NMSP EAST (FT) N = 725540.51 E = 630661.92 W Q CORNER SEC. 28 LAT. = 32.9869756°N LONG. = 104.0421225°W NMSP EAST (FT) N = 722921.40 E = 630629.19 SW CORNER SEC. 28 LAT. = 32.9797762°N LONG. = 104.0422325°W NMSP EAST (FT) N = 720301.96 E = 630602.71		N89°55'52"E 2615.72 FT N89°56'16"E 2615.03 FT N Q CORNER SEC. 21 LAT. = 33.0086655°N LONG. = 104.0334852°W NMSP EAST (FT) N = 730816.58 E = 633255.11 N Q CORNER SEC. 28 LAT. = 32.9941925°N LONG. = 104.0333881°W NMSP EAST (FT) N = 725554.64 E = 633299.88 S Q CORNER SEC. 28 LAT. = 32.9797425°N LONG. = 104.0335084°W NMSP EAST (FT) N = 720297.22 E = 633277.96		NE CORNER SEC. 21 LAT. = 33.0086425°N LONG. = 104.0249569°W NMSP EAST (FT) N = 730819.43 E = 635869.46 E Q CORNER SEC. 21 LAT. = 33.0012599°N LONG. = 104.0247523°W NMSP EAST (FT) N = 728133.59 E = 635940.04 NE CORNER SEC. 28 LAT. = 32.9939935°N LONG. = 104.0247493°W NMSP EAST (FT) N = 725489.88 E = 635948.72 E Q CORNER SEC. 28 LAT. = 32.9867332°N LONG. = 104.0247624°W NMSP EAST (FT) N = 722848.37 E = 635952.44 SE CORNER SEC. 28 LAT. = 32.9794483°N LONG. = 104.0247868°W NMSP EAST (FT) N = 720197.92 E = 635952.76		AS-DRILLED YELLOWKNIFE FEDERAL 2H ELEV. = 3798.3 LAT. = 32.9957290°N (NAD83) LONG. = 104.0408839°W NMSP EAST (FT) N = 726107.19 E = 631000.11 SURFACE LOCATION 355' KOP KICK OFF POINT 561' FSL, 356' FWL LAT. = 32.9957168°N LONG. = 104.0408795°W FIRST TAKE POINT 113' FNL, 321' FWL LAT. = 32.9938671°N LONG. = 104.0409493°W BOTTOM OF HOLE LAT. = 32.9798044°N LONG. = 104.0410815°W NMSP EAST (FT) N = 720313.22 E = 630955.64 LAST TAKE POINT 102' FSL, 354' FWL LAT. = 32.9800517°N LONG. = 104.0410747°W LTP 353' BOTTOM OF HOLE		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Deana Weaver</i> 5/16/2022 Signature Date Deana Weaver Printed Name dweaver@mec.com E-mail Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MAY 3, 2022 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor: Certificate Number: 12797 SURV. NO. 6315	
---	--	---	--	---	--	--	--	--	--

Intent ☐ As Drilled ☒

API #		
Operator Name: MACK ENERGY CORPORATION	Property Name: YELLOWKNIFE FEDERAL	Well Number 2H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	21	15S	29E		561	SOUTH	356	WEST	CHAVES
Latitude 32.9957168					Longitude 104.0408795				NAD 83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	28	15S	29E		113	NORTH	321	WEST	CHAVES
Latitude 32.9938671					Longitude 104.0409493				NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	28	15S	29E		102	SOUTH	354	WEST	CHAVES
Latitude 32.9800517					Longitude 104.0410747				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Mack Energy

Chaves County

Sec 21-T15S-R29E

Yellowknife Federal 2H

Wellbore #1

Survey: Survey #1

Standard Survey Report

09 February, 2022



Microsoft
Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Yellowknife Federal 2H
Project:	Chaves County	TVD Reference:	3798.3+18 @ 3816.30usft
Site:	Sec 21-T15S-R29E	MD Reference:	3798.3+18 @ 3816.30usft
Well:	Yellowknife Federal 2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Project	Chaves County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Sec 21-T15S-R29E			
Site Position:		Northing:	726,107.19 usft	Latitude:	32.995729
From:	Map	Easting:	631,000.11 usft	Longitude:	-104.040884
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.16 °

Well	Yellowknife Federal 2H					
Well Position	+N/-S	0.00 usft	Northing:	726,107.19 usft	Latitude:	32.995729
	+E/-W	0.00 usft	Easting:	631,000.11 usft	Longitude:	-104.040884
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,798.30 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	01/11/22	6.74	60.63	47,868.24889043

Design	Wellbore #1				
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	180.42	

Survey Program	Date	02/09/22			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
137.00	8,746.00	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
137.00	0.60	265.78	137.00	-0.05	-0.72	0.06	0.44	0.44	0.00	
1st MWD Survey										
200.00	0.30	140.78	200.00	-0.20	-0.94	0.21	1.29	-0.48	-198.41	
318.00	0.70	200.70	317.99	-1.12	-1.00	1.13	0.52	0.34	50.78	
407.00	0.70	174.30	406.99	-2.17	-1.14	2.18	0.36	0.00	-29.66	
534.00	0.70	123.30	533.98	-3.37	-0.41	3.37	0.47	0.00	-40.16	
660.00	0.60	98.30	659.97	-3.88	0.88	3.88	0.24	-0.08	-19.84	
787.00	0.60	104.60	786.96	-4.15	2.19	4.13	0.05	0.00	4.96	
913.00	0.50	131.40	912.96	-4.68	3.24	4.65	0.22	-0.08	21.27	
1,040.00	0.40	125.50	1,039.95	-5.30	4.01	5.27	0.09	-0.08	-4.65	

Microsoft
Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Yellowknife Federal 2H
Project:	Chaves County	TVD Reference:	3798.3+18 @ 3816.30usft
Site:	Sec 21-T15S-R29E	MD Reference:	3798.3+18 @ 3816.30usft
Well:	Yellowknife Federal 2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,163.00	0.30	157.70	1,162.95	-5.85	4.48	5.82	0.18	-0.08	26.18
1,251.00	0.30	222.80	1,250.95	-6.23	4.42	6.20	0.37	0.00	73.98
1,377.00	0.30	205.10	1,376.95	-6.77	4.05	6.74	0.07	0.00	-14.05
1,504.00	0.30	234.60	1,503.95	-7.26	3.64	7.24	0.12	0.00	23.23
1,631.00	0.30	267.40	1,630.95	-7.47	3.04	7.45	0.13	0.00	25.83
1,759.00	0.20	323.20	1,758.94	-7.31	2.57	7.29	0.20	-0.08	43.59
1,885.00	0.20	352.70	1,884.94	-6.91	2.41	6.90	0.08	0.00	23.41
2,012.00	0.20	341.80	2,011.94	-6.48	2.31	6.47	0.03	0.00	-8.58
2,138.00	0.40	6.10	2,137.94	-5.84	2.29	5.82	0.18	0.16	19.29
2,264.00	0.50	324.90	2,263.94	-4.95	2.02	4.94	0.26	0.08	-32.70
2,390.00	0.40	341.10	2,389.93	-4.08	1.56	4.07	0.13	-0.08	12.86
2,453.00	0.30	325.50	2,452.93	-3.74	1.40	3.73	0.22	-0.16	-24.76
2,485.00	0.50	179.50	2,484.93	-3.81	1.35	3.80	2.40	0.62	-456.25
2,517.00	1.80	174.70	2,516.92	-4.45	1.40	4.44	4.07	4.06	-15.00
2,549.00	4.20	180.80	2,548.88	-6.12	1.43	6.11	7.56	7.50	19.06
2,580.00	6.40	184.60	2,579.74	-8.98	1.27	8.97	7.18	7.10	12.26
2,612.00	8.70	186.90	2,611.46	-13.16	0.84	13.16	7.25	7.19	7.19
2,643.00	11.10	187.00	2,642.00	-18.45	0.19	18.45	7.74	7.74	0.32
2,675.00	13.40	186.80	2,673.27	-25.19	-0.62	25.20	7.19	7.19	-0.62
2,707.00	15.40	186.10	2,704.26	-33.10	-1.51	33.11	6.27	6.25	-2.19
2,738.00	17.40	184.90	2,734.00	-41.81	-2.34	41.83	6.54	6.45	-3.87
2,770.00	19.50	184.10	2,764.35	-51.91	-3.14	51.93	6.61	6.56	-2.50
2,801.00	22.10	184.90	2,793.33	-62.88	-4.00	62.91	8.44	8.39	2.58
2,833.00	24.60	184.40	2,822.71	-75.52	-5.03	75.56	7.84	7.81	-1.56
2,865.00	26.90	183.90	2,851.53	-89.39	-6.03	89.43	7.22	7.19	-1.56
2,897.00	29.30	182.90	2,879.75	-104.43	-6.92	104.48	7.64	7.50	-3.12
2,928.00	31.80	182.80	2,906.45	-120.17	-7.70	120.22	8.07	8.06	-0.32
2,959.00	34.00	182.90	2,932.48	-136.98	-8.54	137.04	7.10	7.10	0.32
2,991.00	36.60	182.60	2,958.59	-155.45	-9.43	155.52	8.14	8.12	-0.94
3,023.00	38.70	183.00	2,983.93	-174.97	-10.38	175.05	6.61	6.56	1.25
3,054.00	41.50	182.20	3,007.64	-194.92	-11.29	195.00	9.18	9.03	-2.58
3,086.00	44.00	182.20	3,031.13	-216.62	-12.12	216.71	7.81	7.81	0.00
3,118.00	46.50	180.90	3,053.66	-239.34	-12.73	239.43	8.33	7.81	-4.06
3,149.00	49.10	180.30	3,074.48	-262.30	-12.97	262.39	8.51	8.39	-1.94
3,181.00	51.20	180.50	3,094.98	-286.87	-13.14	286.95	6.58	6.56	0.62
3,213.00	54.20	180.40	3,114.37	-312.32	-13.34	312.41	9.38	9.37	-0.31
3,225.00	55.30	180.40	3,121.30	-322.12	-13.41	322.21	9.17	9.17	0.00
3,235.00	56.00	180.50	3,126.94	-330.37	-13.47	330.46	7.05	7.00	1.00
3,247.00	56.40	180.60	3,133.62	-340.34	-13.57	340.43	3.40	3.33	0.83
3,257.00	56.70	180.70	3,139.13	-348.69	-13.66	348.78	3.11	3.00	1.00
3,267.00	57.10	180.60	3,144.59	-357.06	-13.76	357.15	4.09	4.00	-1.00
3,276.00	57.10	180.80	3,149.48	-364.62	-13.85	364.71	1.87	0.00	2.22
3,288.00	57.50	180.70	3,155.96	-374.72	-13.98	374.81	3.41	3.33	-0.83

Microsoft
Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Yellowknife Federal 2H
Project:	Chaves County	TVD Reference:	3798.3+18 @ 3816.30usft
Site:	Sec 21-T15S-R29E	MD Reference:	3798.3+18 @ 3816.30usft
Well:	Yellowknife Federal 2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,299.00	57.80	180.80	3,161.85	-384.01	-14.10	384.10	2.83	2.73	0.91
3,310.00	57.90	180.90	3,167.70	-393.32	-14.24	393.41	1.19	0.91	0.91
3,320.00	58.10	181.00	3,173.00	-401.80	-14.38	401.89	2.17	2.00	1.00
3,330.00	58.20	181.00	3,178.28	-410.29	-14.53	410.39	1.00	1.00	0.00
3,339.00	58.40	181.10	3,183.01	-417.95	-14.67	418.04	2.41	2.22	1.11
3,350.00	58.50	181.30	3,188.76	-427.32	-14.87	427.42	1.80	0.91	1.82
3,362.00	58.70	181.40	3,195.01	-437.56	-15.11	437.66	1.81	1.67	0.83
3,372.00	58.90	181.50	3,200.20	-446.11	-15.32	446.21	2.18	2.00	1.00
3,382.00	59.00	181.60	3,205.35	-454.68	-15.56	454.78	1.32	1.00	1.00
3,392.00	59.20	181.70	3,210.49	-463.25	-15.80	463.36	2.18	2.00	1.00
3,402.00	59.30	181.70	3,215.60	-471.84	-16.06	471.95	1.00	1.00	0.00
3,412.00	59.60	181.70	3,220.68	-480.45	-16.31	480.56	3.00	3.00	0.00
3,424.00	59.90	181.70	3,226.73	-490.81	-16.62	490.92	2.50	2.50	0.00
3,436.00	60.40	181.70	3,232.70	-501.22	-16.93	501.33	4.17	4.17	0.00
3,446.00	61.00	181.70	3,237.60	-509.93	-17.19	510.04	6.00	6.00	0.00
3,457.00	61.90	181.50	3,242.85	-519.59	-17.46	519.70	8.34	8.18	-1.82
3,466.00	62.70	181.50	3,247.04	-527.56	-17.67	527.67	8.89	8.89	0.00
3,529.00	70.20	180.30	3,272.19	-585.26	-18.56	585.38	12.03	11.90	-1.90
3,592.00	79.30	179.50	3,288.74	-645.98	-18.44	646.09	14.50	14.44	-1.27
3,611.50	81.07	179.47	3,292.07	-665.19	-18.27	665.31	9.06	9.06	-0.16
Cross 100' FNL 3611.5 MD/3292.07 TVD -664.75 S -18.27 W N: 725442.4 E: 630981.8									
3,656.00	85.10	179.40	3,297.43	-709.35	-17.83	709.47	9.06	9.06	-0.16
3,756.00	86.00	178.10	3,305.19	-809.03	-15.66	809.12	1.58	0.90	-1.30
3,819.00	86.60	177.60	3,309.25	-871.85	-13.30	871.92	1.24	0.95	-0.79
3,882.00	87.40	178.10	3,312.55	-934.72	-10.94	934.77	1.50	1.27	0.79
3,946.00	87.70	178.20	3,315.28	-998.63	-8.87	998.67	0.49	0.47	0.16
4,009.00	88.80	178.00	3,317.21	-1,061.56	-6.79	1,061.58	1.77	1.75	-0.32
4,073.00	90.20	178.70	3,317.77	-1,125.53	-4.94	1,125.54	2.45	2.19	1.09
4,136.00	90.40	178.30	3,317.44	-1,188.51	-3.29	1,188.50	0.71	0.32	-0.63
4,262.00	90.90	178.10	3,316.01	-1,314.44	0.66	1,314.40	0.43	0.40	-0.16
4,389.00	91.10	178.30	3,313.79	-1,441.36	4.65	1,441.28	0.22	0.16	0.16
4,516.00	90.30	180.40	3,312.24	-1,568.33	6.09	1,568.24	1.77	-0.63	1.65
4,643.00	90.80	180.30	3,311.02	-1,695.32	5.32	1,695.24	0.40	0.39	-0.08
4,769.00	90.90	181.10	3,309.15	-1,821.30	3.78	1,821.22	0.64	0.08	0.63
4,896.00	91.40	181.00	3,306.60	-1,948.25	1.45	1,948.19	0.40	0.39	-0.08
5,022.00	90.10	181.70	3,304.95	-2,074.20	-1.52	2,074.16	1.17	-1.03	0.56
5,149.00	90.50	181.90	3,304.29	-2,201.14	-5.51	2,201.12	0.35	0.31	0.16
5,275.00	91.10	182.50	3,302.53	-2,327.03	-10.34	2,327.04	0.67	0.48	0.48
5,402.00	89.70	182.30	3,301.64	-2,453.91	-15.66	2,453.96	1.11	-1.10	-0.16
5,529.00	88.60	180.40	3,303.53	-2,580.85	-18.65	2,580.92	1.73	-0.87	-1.50
5,656.00	88.80	180.20	3,306.41	-2,707.82	-19.32	2,707.89	0.22	0.16	-0.16
5,719.00	89.50	179.60	3,307.34	-2,770.81	-19.21	2,770.88	1.46	1.11	-0.95
5,783.00	90.30	179.20	3,307.45	-2,834.81	-18.54	2,834.87	1.40	1.25	-0.62

Microsoft
Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Yellowknife Federal 2H
Project:	Chaves County	TVD Reference:	3798.3+18 @ 3816.30usft
Site:	Sec 21-T15S-R29E	MD Reference:	3798.3+18 @ 3816.30usft
Well:	Yellowknife Federal 2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,846.00	90.30	179.50	3,307.12	-2,897.80	-17.82	2,897.86	0.48	0.00	0.48	
5,909.00	90.70	179.20	3,306.57	-2,960.80	-17.11	2,960.84	0.79	0.63	-0.48	
5,973.00	91.30	179.30	3,305.46	-3,024.78	-16.27	3,024.82	0.95	0.94	0.16	
6,036.00	91.90	179.00	3,303.70	-3,087.75	-15.34	3,087.78	1.06	0.95	-0.48	
6,099.00	92.50	179.30	3,301.28	-3,150.70	-14.40	3,150.72	1.06	0.95	0.48	
6,162.00	92.50	179.10	3,298.53	-3,213.63	-13.52	3,213.64	0.32	0.00	-0.32	
6,226.00	92.30	179.50	3,295.85	-3,277.57	-12.74	3,277.57	0.70	-0.31	0.62	
6,289.00	92.10	179.90	3,293.43	-3,340.52	-12.41	3,340.52	0.71	-0.32	0.63	
6,353.00	92.40	179.80	3,290.92	-3,404.47	-12.25	3,404.47	0.49	0.47	-0.16	
6,480.00	93.00	179.80	3,284.94	-3,531.33	-11.80	3,531.32	0.47	0.47	0.00	
6,606.00	93.00	180.70	3,278.34	-3,657.15	-12.35	3,657.15	0.71	0.00	0.71	
6,733.00	93.10	181.00	3,271.59	-3,783.96	-14.23	3,783.96	0.25	0.08	0.24	
6,859.00	91.40	181.30	3,266.64	-3,909.83	-16.76	3,909.85	1.37	-1.35	0.24	
6,986.00	91.50	181.70	3,263.43	-4,036.75	-20.08	4,036.79	0.32	0.08	0.31	
7,112.00	91.40	183.10	3,260.24	-4,162.59	-25.36	4,162.67	1.11	-0.08	1.11	
7,238.00	90.90	182.00	3,257.71	-4,288.44	-30.96	4,288.55	0.96	-0.40	-0.87	
7,365.00	89.60	181.10	3,257.15	-4,415.39	-34.40	4,415.52	1.24	-1.02	-0.71	
7,492.00	89.90	179.60	3,257.71	-4,542.38	-35.17	4,542.52	1.20	0.24	-1.18	
7,618.00	90.40	179.10	3,257.38	-4,668.37	-33.74	4,668.49	0.56	0.40	-0.40	
7,745.00	91.10	178.50	3,255.72	-4,795.33	-31.08	4,795.43	0.73	0.55	-0.47	
7,871.00	92.10	179.00	3,252.20	-4,921.25	-28.34	4,921.33	0.89	0.79	0.40	
7,998.00	91.60	179.70	3,248.10	-5,048.18	-26.90	5,048.24	0.68	-0.39	0.55	
8,125.00	92.80	180.90	3,243.22	-5,175.08	-27.56	5,175.14	1.34	0.94	0.94	
8,251.00	92.50	181.20	3,237.40	-5,300.92	-29.87	5,301.00	0.34	-0.24	0.24	
8,378.00	92.00	182.20	3,232.41	-5,427.76	-33.63	5,427.87	0.88	-0.39	0.79	
8,504.00	91.90	181.80	3,228.12	-5,553.61	-38.03	5,553.74	0.33	-0.08	-0.32	
8,631.00	91.30	181.80	3,224.58	-5,680.50	-42.01	5,680.66	0.47	-0.47	0.00	
8,656.40	90.68	181.47	3,224.14	-5,705.89	-42.74	5,706.05	2.79	-2.46	-1.31	
Cross 100' FSL 8656.4 MD/3224.14 TVD -5705.89 S -42.74 W N: 720401.3 E: 630957.3										
8,692.00	89.80	181.00	3,223.99	-5,741.48	-43.50	5,741.64	2.79	-2.46	-1.31	
Last MWD Survey 8692 MD/3223.99 TVD -5741.48 S -43.50 W N: 720365.7 E: 630956.6										
8,746.00	89.80	181.00	3,224.18	-5,795.47	-44.45	5,795.64	0.00	0.00	0.00	
PTB 8746 MD/3224.18 TVD -5795.47 S -44.45 W N: 720311.7 E: 630955.6										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
137.00	137.00	-0.05	-0.72	1st MWD Survey	
3,611.50	3,292.07	-665.19	-18.27	Cross 100' FNL 3611.5 MD/3292.07 TVD -664.75 S -18.27 W N: 725442.4 E: 630956.6	
8,656.40	3,224.14	-5,705.89	-42.74	Cross 100' FSL 8656.4 MD/3224.14 TVD -5705.89 S -42.74 W N: 720401.3 E: 630957.3	
8,692.00	3,223.99	-5,741.48	-43.50	Last MWD Survey 8692 MD/3223.99 TVD -5741.48 S -43.50 W N: 720365.7 E: 630956.6	
8,746.00	3,224.18	-5,795.47	-44.45	PTB 8746 MD/3224.18 TVD -5795.47 S -44.45 W N: 720311.7 E: 630955.6	

Microsoft
Survey Report

Company:	Mack Energy	Local Co-ordinate Reference:	Well Yellowknife Federal 2H
Project:	Chaves County	TVD Reference:	3798.3+18 @ 3816.30usft
Site:	Sec 21-T15S-R29E	MD Reference:	3798.3+18 @ 3816.30usft
Well:	Yellowknife Federal 2H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Checked By: _____ Approved By: _____ Date: _____

Submit a Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-005-64322
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☐
2. Name of Operator Mack Energy Corporation		6. State Oil & Gas Lease No. NMNM-131581 (Federal)
3. Address of Operator P.O. Box 960, Artesia, NM 88210		7. Lease Name or Unit Agreement Name Yellowknife Federal
4. Well Location Unit Letter M : 565 feet from the South line and 355 feet from the West line Section 21 Township 15S Range 29E NMPM County Chaves		8. Well Number 2H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3798.3' GR		9. OGRID Number 013837
		10. Pool name or Wildcat Round Tank; San Andres

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: Completion ☒	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

4/2-22/2022 Perforated 3624-8656' w/ 672 holes. Frac w/ 1328.8bbls 15% Acid, 7513.1bbls Slickwater, 105,433.8bbls 20# Crosslink, 433,680# 100 Mesh, 815,900# 30/50 Brown, 3,911,770# 20/40 White, 688,960# 20/40 Resin. RIH w/ 73jts 3 1/2" J-55 tbg @ 2411', Stator-123M900 HN70 @ 2448'.

No Logs

Spud Date:

1/31/2022

Rig Release Date:

2/10/2022

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Deana Weaver TITLE Regulatory Technician II DATE 5/16/2022

Type or print name Deana Weaver E-mail address: dweaver@mec.com PHONE: 575-748-1288

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

Submit To Appropriate District Office Two Copies <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 Revised April 3, 2017					
WELL COMPLETION OR RECOMPLETION REPORT AND LOG								1. WELL API NO. 30-005-64322			
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)								5. Lease Name or Unit Agreement Name Yellowknife Federal			
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER _____								6. Well Number: 2H			
8. Name of Operator Mack Energy Corporation						9. OGRID 013837					
10. Address of Operator P.O. Box 960 Artesia, NM 88210						11. Pool name or Wildcat Round Tank; San Andres					
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County	
Surface:	M	21	15S	29E		565	South	355	West	Chaves	
BH:	M	28	15S	29E		12	South	353	West	Chaves	
13. Date Spudded 01/31/2022	14. Date T.D. Reached 2/10/2022		15. Date Rig Released 2/10/2022			16. Date Completed (Ready to Produce) 4/22/2022			17. Elevations (DF and RKB, RT, GR, etc.) 3798.3'		
18. Total Measured Depth of Well 8746'			19. Plug Back Measured Depth 3224'			20. Was Directional Survey Made? yes			21. Type Electric and Other Logs Run No Logs		
22. Producing Interval(s), of this completion - Top, Bottom, Name 3624-8656' Round Tank; San Andres											
23. CASING RECORD (Report all strings set in well)											
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED	
13 3/8"		48#		252'		17 1/2"		340sx			
9 5/8"		36#		1209'		12 1/4"		420sx			
7"		26#		3469'		8 3/4"		275sx			
5 1/2"		17#		5281'		8 3/4"		1575sx			
24. LINER RECORD											
SIZE	TOP	BOTTOM		SACKS CEMENT	SCREEN		25. TUBING RECORD				
							SIZE		DEPTH SET	PACKER SET	
							3 1/2"		2411'		
26. Perforation record (interval, size, and number)						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.					
3624-8656', .41, 672 holes						DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED			
						3624-8656'		1328.8bbls 15% Acid, 7513.1bbls SW,			
								105433.8bbls X-Link, 433680# 100 Mesh,			
								815900# 30/50 Brown, 3911770# 20/40 White, 688960# 20/40 Resin			
28. PRODUCTION											
Date First Production 5/14/2022		Production Method (Flowing, gas lift, pumping - Size and type pump) Stator 123M900 HN 70 @ 2448'					Well Status (Prod. or Shut-in) Producing				
Date of Test 5/15/2022	Hours Tested 24hrs	Choke Size	Prod'n For Test Period	Oil - Bbl 21	Gas - MCF 6	Water - Bbl. 1431	Gas - Oil Ratio 285				
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl. 21	Gas - MCF 6	Water - Bbl. 1431	Oil Gravity - API - (Corr.) 36.9					
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold								30. Test Witnessed By Jerry Sherrell			
31. List Attachments											
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.								33. Rig Release Date: 2/10/2022			
34. If an on-site burial was used at the well, report the exact location of the on-site burial:											
Latitude _____ Longitude _____ NAD83											
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief											
Signature Deana Weaver		Printed Name Deana Weaver		Title Regulatory Technician II		Date 5/16/2022					
E-mail Address dweaver@mec.com											

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A "
T. Salt 265'	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt 775'	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates 933'	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers 1167'	T. Devonian	T. Cliff House	T. Leadville
T. Queen 1655'	T. Silurian	T. Menefee	T. Madison
T. Grayburg 2054'	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres 2350'	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

From	To	Thickness In Feet	Lithology



Received to Imaging: 9/16/2022 12:11:54 PM

Mack Energy
Project: Chaves County
Site: Sec 21-T1S-R29E
Well: Yellowknife Federal 2H
Wellbore: Wellbore #1
Plan: Plan #1 (Yellowknife Federal 2H/Wellbore #1)

WELL DETAILS: Yellowknife Federal 2H
Ground Elevation: 3796.30
RKB Elevation: 3796.3+18 @ 3816.30usft
Rig Name:
Northing 726107.19 Easting 631000.11 Latitude 32.995729 Longitude -104.040884

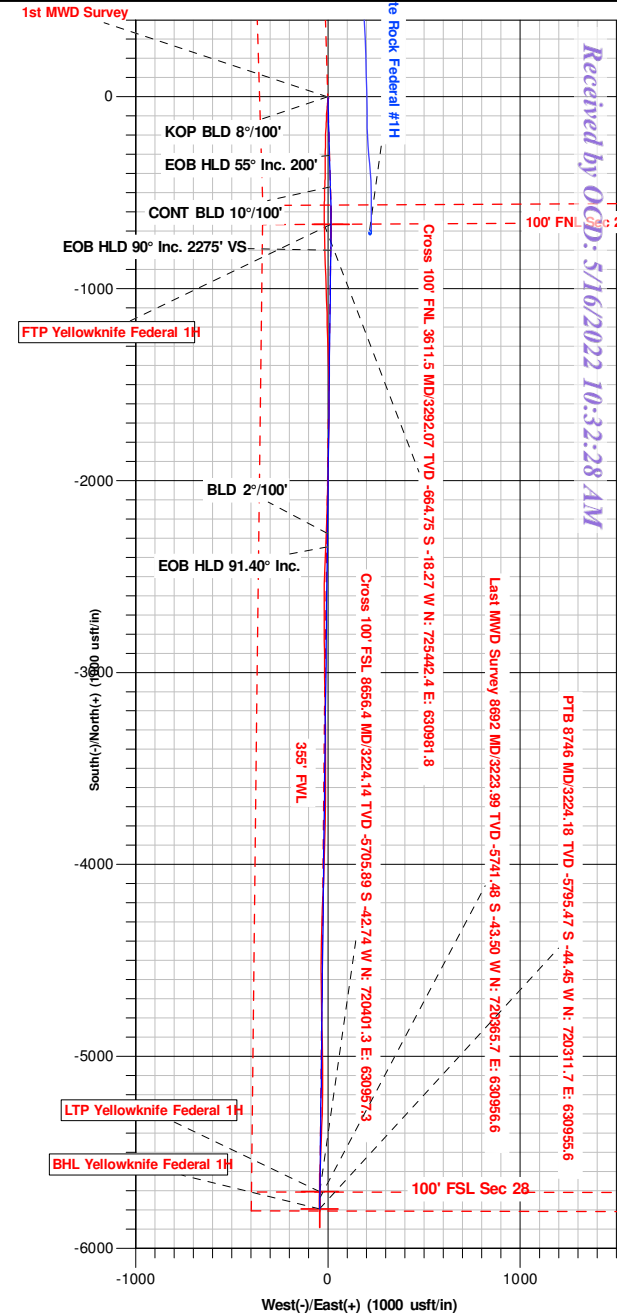
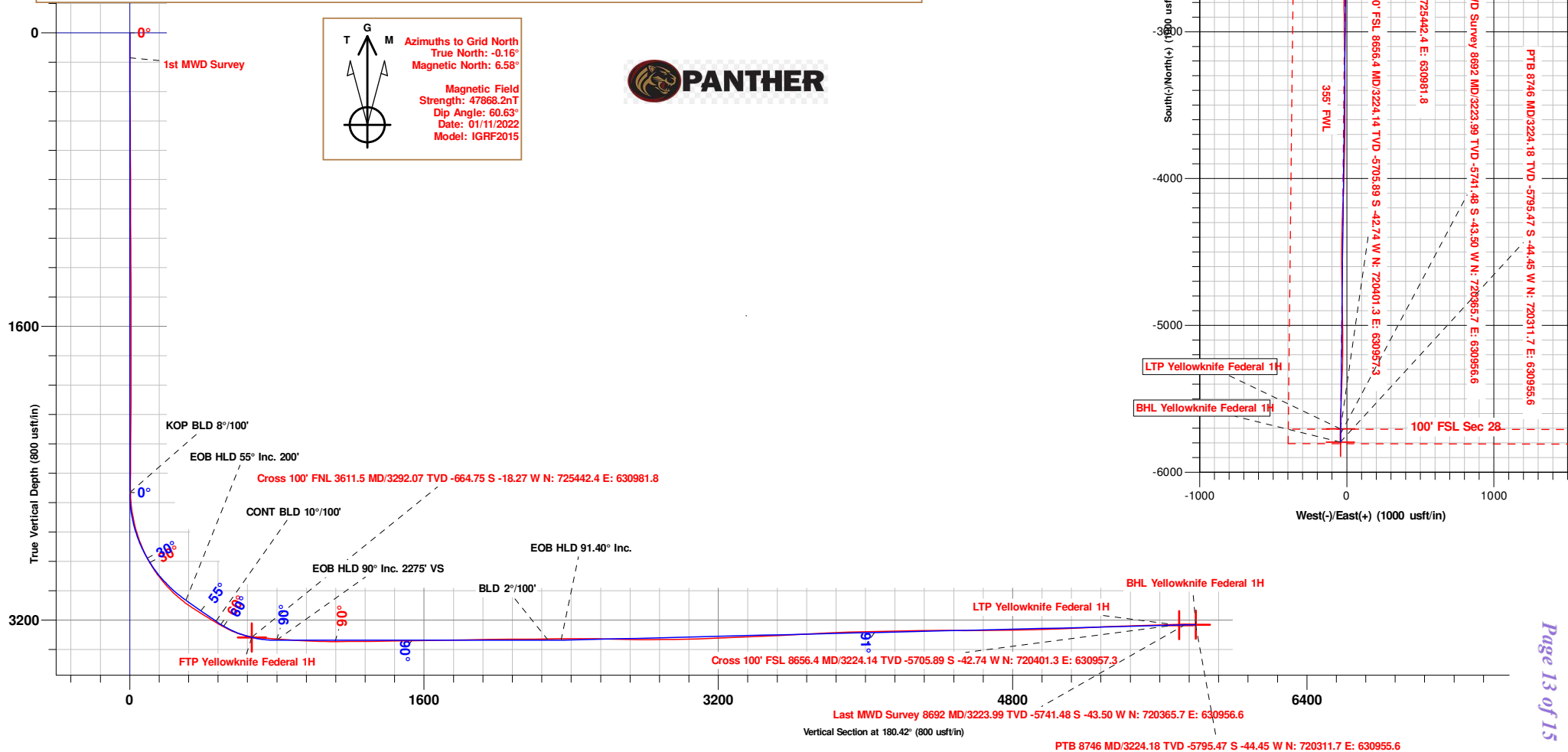
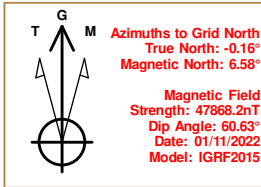
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL Yellowknife Federal 1H	3226.00	-5795.86	-42.39	720311.33	630957.72	32.979799	-104.041075
LTP Yellowknife Federal 1H	3228.19	-5705.89	-41.48	720401.30	630958.63	32.980046	-104.041071
FTP Yellowknife Federal 1H	3295.25	-664.75	15.46	725442.44	631015.57	32.993902	-104.040840

- plan hits target center
- plan misses target center by 0.13usft at 8652.90usft MD (3228.19 TVD, -5705.89 N, -41.35 E)
- plan misses target center by 0.35usft at 3609.18usft MD (3295.25 TVD, -664.75 N, 15.81 E)

Section Details

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2505.79	0.00	0.00	2505.79	0.00	0.00	0.00	0.00	0.00
3193.29	55.00	178.40	3092.46	-305.28	8.53	8.00	178.40	305.21
3393.29	55.00	178.40	3207.18	-469.05	13.10	0.00	0.00	468.94
3743.92	90.00	180.66	3311.00	-798.25	15.16	10.00	3.94	798.12
5220.81	90.00	180.66	3311.00	-2275.04	-1.86	0.00	0.00	2275.00
5290.65	91.40	180.66	3310.15	-2344.87	-2.66	2.00	-0.02	2344.82
8742.90	91.40	180.66	3226.00	-5795.86	-42.39	0.00	0.00	5796.02



District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

ACKNOWLEDGMENTS

Action 106987

ACKNOWLEDGMENTS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 106987
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 106987

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 106987
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	None	9/16/2022