

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

EMNRD-OCD ARTESIA
REC'D: 05/04/2020
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

1 Operator name and Address Mack Energy Coporation P.O. Box 960 Artesia, NM 88210		2 OGRID Number 013837
		3 Reason for Filing Code/ Effective Date NW
4 API Number 30-005-64307	5 Pool Name Round Tank; San Andres	6 Pool Code 52770
7 Property Code 320519	8 Property Name Hamilton Federal Com	9 Well Number 1H

II. ¹⁰ Surface Location

UI or lot no. M	Section 15	Township 15S	Range 29E	Lot Idn	Feet from the 383	North/South Line South	Feet from the 598	East/West line West	County Chaves, NM
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III. Bottom Hole Location

UL or lot no. M	Section 22	Township 15S	Range 29E	Lot Idn	Feet from the 2	North/South line South	Feet from the 329	East/West line West	County Chaves, NM
12 Lse Code F	13 Producing Method Code P	14 Gas Connection Date 10/14/2019	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
278421	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 8/3/2019	22 Ready Date 10/4/2019	23 TD 8750'	24 PBTD 8701.11'	25 Perforations 3699-8650	26 DHC, MC
27 Hole Size 17 1/2"	28 Casing & Tubing Size 13 3/8" J-55	29 Depth Set 220'	30 Sacks Cement 425		
12 1/4"	9 5/8" LT&C	1200'	465		
8 3/4"	7" & 5 1/2" HCP-110	8750'	1925		
	2 7/8 & 3 1/2" J-55 (tubing)	2456'			

V. Well Test Data

31 Date New Oil 10/16/2019	32 Gas Delivery Date 10/14/2019	33 Test Date 10/16/2019	34 Test Length 24 hours	35 Tbg. Pressure	36 Csg. Pressure
37 Choke Size 14	38 Oil	39 Water 2224	40 Gas 26		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 Approved by: DENIED		
Printed name: Deana Weaver			Title:		
Title: Production Clerk			Approval Date:		
E-mail Address: dweaver@mec.com			The highlighted areas are requiring your immediate attention. Please amend, look over well files in OCD PERMITTING. Sundry Notices should match what is entered on C-104 and 3160-4, look over attached and re-submit corrected documents ASAP. Logs missing.		
Date: 10/22/19	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

EMNRD-OCD ARTESIA
REC'D: 05/04/2020 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 30-005-64307	² Pool Code 52770	³ Pool Name Round Tank; San Andres
⁴ Property Code 320519	⁵ Property Name HAMILTON FEDERAL COM	
⁷ OGRID No. 13837	⁸ Operator Name MACK ENERGY CORPORATION	⁶ Well Number 1H ⁹ Elevation 3863.7

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	15	15 S	29 E		383	SOUTH	598	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	22	15 S	29 E		2	SOUTH	329	WEST	CHAVES

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160			

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. 15 LAT. = 33.0232846°N LONG. = 104.0248543°W NMSP EAST (FT) N = 736146.75 E = 635885.28 W Q CORNER SEC. 15 LAT. = 33.0160243°N LONG. = 104.0248725°W NMSP EAST (FT) N = 733505.21 E = 635887.45 SW CORNER SEC. 15 LAT. = 33.0086425°N LONG. = 104.0249569°W NMSP EAST (FT) N = 730819.43 E = 635869.46 W Q CORNER SEC. 22 LAT. = 33.0012599°N LONG. = 104.0247523°W NMSP EAST (FT) N = 728133.59 E = 635940.04 SW CORNER SEC. 22 LAT. = 32.9939935°N LONG. = 104.0247493°W NMSP EAST (FT) N = 725489.88 E = 635948.72		N Q CORNER SEC. 15 LAT. = 33.0232830°N LONG. = 104.0162387°W NMSP EAST (FT) N = 736153.99 E = 638525.95 HAMILTON FEDERAL COM 1H ELEV. = 3863.7' LAT. = 33.0097108°N (NAD83) LONG. = 104.0229943°W NMSP EAST (FT) N = 731209.87 E = 636469.94 S Q CORNER SEC. 15 LAT. = 33.0087116°N LONG. = 104.0163901°W NMSP EAST (FT) N = 730852.37 E = 638495.53 SE CORNER SEC. 15 LAT. = 33.0087818°N LONG. = 104.0077346°W NMSP EAST (FT) N = 733484.36 E = 641140.79 SE CORNER SEC. 15 LAT. = 33.0087818°N LONG. = 104.0077346°W NMSP EAST (FT) N = 730885.92 E = 641120.85 E Q CORNER SEC. 22 LAT. = 33.0015079°N LONG. = 104.0077509°W NMSP EAST (FT) N = 728239.54 E = 641151.97 SE CORNER SEC. 22 LAT. = 32.9942030°N LONG. = 104.0076851°W NMSP EAST (FT) N = 725581.88 E = 641180.37		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. Deana Weaver 10/22/19 Signature Date Deana Weaver Printed Name dweaver@mec.com E-mail Address	
NE CORNER SEC. 15 LAT. = 33.0232846°N LONG. = 104.0248543°W NMSP EAST (FT) N = 736146.75 E = 635885.28 W Q CORNER SEC. 15 LAT. = 33.0160243°N LONG. = 104.0248725°W NMSP EAST (FT) N = 733505.21 E = 635887.45 SW CORNER SEC. 15 LAT. = 33.0086425°N LONG. = 104.0249569°W NMSP EAST (FT) N = 730819.43 E = 635869.46 W Q CORNER SEC. 22 LAT. = 33.0012599°N LONG. = 104.0247523°W NMSP EAST (FT) N = 728133.59 E = 635940.04 SW CORNER SEC. 22 LAT. = 32.9939935°N LONG. = 104.0247493°W NMSP EAST (FT) N = 725489.88 E = 635948.72		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. JULY 11, 2019 Date of Survey [Signature] Signature and Seal of Professional Surveyor Certificate Number [Signature] JARAMILLO, P.S. 5311C			

Intent ☐ As Drilled ☒

API #

Operator Name: MACK ENERGY CORPORATION	Property Name: HAMILTON FEDERAL COM	Well Number 1H
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Kick Off Point (KOP)

UL M	Section 15	Township 15S	Range 29E	Lot	Feet 323	From N/S SOUTH	Feet 598	From E/W WEST	County CHAVES
Latitude 33.0097108					Longitude 104.0229943			NAD 83	

First Take Point (FTP)

UL D	Section 22	Township 15S	Range 29E	Lot	Feet 127	From N/S NORTH	Feet 358	From E/W WEST	County CHAVES
Latitude 33.0083030					Longitude 104.0237799			NAD 83	

Last Take Point (LTP)

UL M	Section 22	Township 15S	Range 29E	Lot	Feet 100	From N/S SOUTH	Feet 330	From E/W WEST	County CHAVES
Latitude 32.9942675					Longitude 104.0236727			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
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KZ 06/29/2018

Mack Energy

Chaves County

Sec 15-T15S-R29E

Hamilton Federal Com #1H

Wellbore #1

Survey: Survey #1

Standard Survey Report

15 August, 2019

Microsoft
Survey Report

Company:	Mack Energy	Local Co-ordinate Reference:	Well Hamilton Federal Com #1H
Project:	Chaves County	TVD Reference:	3863.7 + 13 @ 3876.70usft
Site:	Sec 15-T15S-R29E	MD Reference:	3863.7 + 13 @ 3876.70usft
Well:	Hamilton Federal Com #1H	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 15-T15S-R29E			
Site Position:		Northing:	731,209.87 usft	Latitude:	33.009711
From:	Map	Easting:	636,469.94 usft	Longitude:	-104.022995
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.17 °

Well	Hamilton Federal Com #1H					
Well Position	+N/-S	0.00 usft	Northing:	731,209.87 usft	Latitude:	33.009711
	+E/-W	0.00 usft	Easting:	636,469.94 usft	Longitude:	-104.022995
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,863.70 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/15/19	7.00	60.68	48,136.34560560

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	181.92	

Survey Program		Date	08/15/19		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
162.00	8,750.00	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
162.00	0.40	121.00	162.00	-0.29	0.48	0.27	0.25	0.25	0.00
1st MWD Survey									
180.00	0.40	102.80	180.00	-0.34	0.60	0.32	0.70	0.00	-101.11
248.00	0.70	98.50	248.00	-0.45	1.24	0.41	0.45	0.44	-6.32
307.00	1.00	103.80	306.99	-0.63	2.10	0.56	0.53	0.51	8.98
395.00	1.60	92.40	394.97	-0.86	4.07	0.73	0.74	0.68	-12.95
485.00	1.50	98.90	484.93	-1.10	6.49	0.88	0.22	-0.11	7.22
576.00	1.30	98.10	575.91	-1.43	8.69	1.14	0.22	-0.22	-0.88
665.00	0.80	90.50	664.89	-1.57	10.31	1.23	0.58	-0.56	-8.54
752.00	1.00	84.30	751.88	-1.50	11.67	1.11	0.26	0.23	-7.13

Microsoft
Survey Report

Company:	Mack Energy	Local Co-ordinate Reference:	Well Hamilton Federal Com #1H
Project:	Chaves County	TVD Reference:	3863.7 + 13 @ 3876.70usft
Site:	Sec 15-T15S-R29E	MD Reference:	3863.7 + 13 @ 3876.70usft
Well:	Hamilton Federal Com #1H	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)
847.00	1.70	80.00	846.85	-1.18	13.89	0.71	0.74	0.74	-4.53
942.00	1.00	89.90	941.83	-0.93	16.10	0.39	0.77	-0.74	10.42
1,038.00	0.10	58.20	1,037.82	-0.89	17.01	0.32	0.95	-0.94	-33.02
1,140.00	0.30	242.50	1,139.82	-0.96	16.85	0.40	0.39	0.20	-172.25
1,241.00	0.26	285.27	1,240.82	-1.02	16.39	0.47	0.21	-0.04	42.35
1,336.00	0.26	256.09	1,335.82	-1.02	15.98	0.48	0.14	0.00	-30.72
1,431.00	0.48	266.72	1,430.82	-1.09	15.37	0.58	0.24	0.23	11.19
1,526.00	0.70	257.05	1,525.81	-1.25	14.41	0.76	0.25	0.23	-10.18
1,622.00	0.83	254.07	1,621.80	-1.57	13.17	1.13	0.14	0.14	-3.10
1,717.00	0.35	241.50	1,716.80	-1.90	12.25	1.49	0.52	-0.51	-13.23
1,812.00	0.48	254.77	1,811.79	-2.14	11.61	1.75	0.17	0.14	13.97
1,907.00	0.48	256.97	1,906.79	-2.33	10.84	1.97	0.02	0.00	2.32
2,002.00	0.57	240.71	2,001.79	-2.65	10.04	2.32	0.18	0.09	-17.12
2,097.00	0.97	284.48	2,096.78	-2.68	8.85	2.39	0.72	0.42	46.07
2,192.00	1.10	298.10	2,191.76	-2.05	7.27	1.81	0.29	0.14	14.34
2,288.00	1.05	290.98	2,287.75	-1.30	5.63	1.12	0.15	-0.05	-7.42
2,383.00	0.88	291.60	2,382.73	-0.72	4.14	0.59	0.18	-0.18	0.65
2,478.00	1.05	283.77	2,477.72	-0.25	2.62	0.16	0.23	0.18	-8.24
2,513.00	1.58	244.49	2,512.71	-0.38	1.87	0.32	2.90	1.51	-112.23
2,573.00	4.92	223.22	2,572.61	-2.61	-0.64	2.63	5.82	5.57	-35.45
2,620.00	9.32	221.28	2,619.23	-6.94	-4.53	7.09	9.37	9.36	-4.13
2,668.00	13.49	216.45	2,666.28	-14.37	-10.42	14.71	8.90	8.69	-10.06
2,715.00	17.14	211.44	2,711.60	-24.69	-17.30	25.26	8.25	7.77	-10.66
2,763.00	19.02	205.73	2,757.23	-37.78	-24.38	38.57	5.38	3.92	-11.90
2,810.00	21.84	204.32	2,801.27	-52.64	-31.31	53.66	6.09	6.00	-3.00
2,858.00	24.52	203.18	2,845.39	-69.94	-38.91	71.20	5.66	5.58	-2.37
2,905.00	27.69	203.18	2,887.59	-88.95	-47.05	90.47	6.74	6.74	0.00
2,953.00	30.67	205.73	2,929.50	-110.24	-56.75	112.07	6.73	6.21	5.31
3,000.00	34.89	205.81	2,969.01	-133.15	-67.82	135.34	8.98	8.98	0.17
3,049.00	39.81	205.64	3,007.95	-159.92	-80.71	162.53	10.04	10.04	-0.35
3,096.00	44.43	206.34	3,042.80	-188.24	-94.53	191.30	9.88	9.83	1.49
3,144.00	47.94	207.04	3,076.03	-219.18	-110.09	222.74	7.39	7.31	1.46
3,191.00	50.63	208.63	3,106.68	-250.67	-126.73	254.77	6.27	5.72	3.38
3,226.00	52.87	207.48	3,128.35	-274.93	-139.65	279.44	6.90	6.40	-3.29
3,236.00	53.04	207.13	3,134.37	-282.02	-143.31	286.65	3.27	1.70	-3.50
3,246.00	53.31	207.31	3,140.37	-289.14	-146.98	293.89	3.06	2.70	1.80
3,256.00	53.35	206.78	3,146.34	-296.28	-150.62	301.15	4.27	0.40	-5.30
3,266.00	53.44	206.96	3,152.30	-303.44	-154.25	308.43	1.70	0.90	1.80
3,276.00	53.70	206.96	3,158.24	-310.61	-157.90	315.72	2.60	2.60	0.00
3,286.00	53.79	206.52	3,164.16	-317.82	-161.53	323.04	3.66	0.90	-4.40
3,296.00	53.88	206.43	3,170.06	-325.04	-165.13	330.38	1.16	0.90	-0.90
3,306.00	54.10	206.43	3,175.94	-332.29	-168.73	337.74	2.20	2.20	0.00
3,316.00	54.18	206.25	3,181.79	-339.55	-172.32	345.12	1.66	0.80	-1.80

Microsoft
Survey Report

Company:	Mack Energy	Local Co-ordinate Reference:	Well Hamilton Federal Com #1H
Project:	Chaves County	TVD Reference:	3863.7 + 13 @ 3876.70usft
Site:	Sec 15-T15S-R29E	MD Reference:	3863.7 + 13 @ 3876.70usft
Well:	Hamilton Federal Com #1H	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)	
3,326.00	54.32	206.34	3,187.64	-346.83	-175.92	352.51	1.58	1.40	0.90	
3,336.00	54.45	205.90	3,193.46	-354.12	-179.50	359.93	3.81	1.30	-4.40	
3,346.00	54.45	205.29	3,199.27	-361.46	-183.01	367.38	4.96	0.00	-6.10	
3,356.00	54.67	205.64	3,205.07	-368.82	-186.51	374.85	3.60	2.20	3.50	
3,366.00	54.49	205.37	3,210.87	-376.17	-190.02	382.32	2.84	-1.80	-2.70	
3,376.00	54.89	205.37	3,216.65	-383.55	-193.52	389.80	4.00	4.00	0.00	
3,379.00	54.93	205.27	3,218.37	-385.77	-194.57	392.06	2.86	1.18	-3.19	
Cross Lease Line 3379' MD/3218.37 TVD -385.77 S -194.57 W N: 730824.1 E: 636275.3										
3,387.00	55.02	205.02	3,222.96	-391.70	-197.35	398.08	2.86	1.18	-3.18	
3,398.00	55.90	204.23	3,229.20	-399.93	-201.13	406.43	9.95	8.00	-7.18	
3,429.00	58.05	200.98	3,246.10	-423.92	-211.11	430.75	11.20	6.94	-10.48	
3,476.00	62.53	198.08	3,269.39	-462.39	-224.73	469.64	10.93	9.53	-6.17	
3,503.81	65.20	196.17	3,281.64	-486.25	-232.07	493.73	11.41	9.59	-6.88	
FTP 3503.81 MD/3281.64 TVD -486.25 S -232.07 W N: 730723.6 E: 636237.8										
3,524.00	67.15	194.83	3,289.80	-504.04	-237.01	511.69	11.41	9.67	-6.62	
3,531.01	67.68	194.47	3,292.49	-510.31	-238.64	518.00	8.99	7.62	-5.17	
FTP Hamilton Federal Com #1H Plan #2										
3,533.92	67.91	194.32	3,293.59	-512.92	-239.31	520.63	8.99	7.63	-5.14	
FTP Hamilton Federal Com #1H										
3,620.00	74.53	190.08	3,321.30	-592.52	-256.46	600.76	8.99	7.69	-4.92	
3,667.00	79.23	187.97	3,331.97	-637.71	-263.63	646.17	10.91	10.00	-4.49	
3,715.00	84.55	184.46	3,338.74	-684.93	-268.76	693.53	13.24	11.08	-7.31	
3,769.00	86.84	183.58	3,342.79	-738.64	-272.54	747.34	4.54	4.24	-1.63	
3,832.00	87.41	183.23	3,345.95	-801.45	-276.27	810.24	1.06	0.90	-0.56	
3,895.00	90.53	178.74	3,347.08	-864.40	-277.36	873.19	8.68	4.95	-7.13	
3,916.00	90.40	178.90	3,346.91	-885.40	-276.92	894.16	0.98	-0.62	0.76	
4,011.00	91.30	176.70	3,345.50	-980.31	-273.28	988.90	2.50	0.95	-2.32	
4,107.00	90.20	175.40	3,344.25	-1,076.07	-266.66	1,084.39	1.77	-1.15	-1.35	
4,202.00	88.90	175.20	3,344.99	-1,170.75	-258.88	1,178.75	1.38	-1.37	-0.21	
4,297.00	89.60	176.90	3,346.24	-1,265.51	-252.34	1,273.24	1.94	0.74	1.79	
4,392.00	90.00	179.00	3,346.57	-1,360.44	-248.94	1,368.01	2.25	0.42	2.21	
4,487.00	91.70	178.80	3,345.16	-1,455.41	-247.12	1,462.86	1.80	1.79	-0.21	
4,582.00	90.40	178.30	3,343.42	-1,550.36	-244.71	1,557.68	1.47	-1.37	-0.53	
4,677.00	89.50	178.00	3,343.50	-1,645.31	-241.65	1,652.47	1.00	-0.95	-0.32	
4,772.00	90.00	178.70	3,343.91	-1,740.27	-238.91	1,747.29	0.91	0.53	0.74	
4,868.00	89.90	177.60	3,344.00	-1,836.22	-235.81	1,843.08	1.15	-0.10	-1.15	
4,963.00	88.50	178.30	3,345.33	-1,931.15	-232.41	1,937.84	1.65	-1.47	0.74	
5,058.00	89.60	177.90	3,346.90	-2,026.08	-229.26	2,032.61	1.23	1.16	-0.42	
5,153.00	91.00	176.50	3,346.40	-2,120.96	-224.62	2,127.28	2.08	1.47	-1.47	
5,248.00	90.50	178.10	3,345.16	-2,215.84	-220.15	2,221.96	1.76	-0.53	1.68	
5,343.00	89.70	179.90	3,344.99	-2,310.82	-218.49	2,316.84	2.07	-0.84	1.89	
5,439.00	91.00	179.70	3,344.41	-2,406.82	-218.16	2,412.77	1.37	1.35	-0.21	
5,534.00	90.20	180.90	3,343.41	-2,501.81	-218.65	2,507.72	1.52	-0.84	1.26	
5,629.00	89.60	179.50	3,343.58	-2,596.81	-218.99	2,602.68	1.60	-0.63	-1.47	

Microsoft
Survey Report

Company:	Mack Energy	Local Co-ordinate Reference:	Well Hamilton Federal Com #1H
Project:	Chaves County	TVD Reference:	3863.7 + 13 @ 3876.70usft
Site:	Sec 15-T15S-R29E	MD Reference:	3863.7 + 13 @ 3876.70usft
Well:	Hamilton Federal Com #1H	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)	
5,724.00	89.60	177.80	3,344.24	-2,691.77	-216.75	2,697.52	1.79	0.00	-1.79	
5,819.00	89.40	177.20	3,345.07	-2,786.68	-212.60	2,792.23	0.67	-0.21	-0.63	
5,914.00	89.80	178.30	3,345.73	-2,881.60	-208.87	2,886.97	1.23	0.42	1.16	
6,009.00	90.10	179.30	3,345.82	-2,976.58	-206.88	2,981.83	1.10	0.32	1.05	
6,105.00	89.70	179.00	3,345.98	-3,072.57	-205.46	3,077.72	0.52	-0.42	-0.31	
6,200.00	90.00	178.70	3,346.23	-3,167.55	-203.55	3,172.58	0.45	0.32	-0.32	
6,295.00	89.40	178.70	3,346.73	-3,262.52	-201.40	3,267.43	0.63	-0.63	0.00	
6,391.00	89.10	179.30	3,347.99	-3,358.50	-199.72	3,363.30	0.70	-0.31	0.62	
6,486.00	90.20	180.10	3,348.57	-3,453.49	-199.23	3,458.22	1.43	1.16	0.84	
6,581.00	90.10	179.70	3,348.32	-3,548.49	-199.06	3,553.17	0.43	-0.11	-0.42	
6,677.00	89.30	180.40	3,348.82	-3,644.49	-199.14	3,649.11	1.11	-0.83	0.73	
6,772.00	90.60	180.10	3,348.90	-3,739.49	-199.56	3,744.07	1.40	1.37	-0.32	
6,867.00	90.60	180.70	3,347.91	-3,834.48	-200.22	3,839.03	0.63	0.00	0.63	
6,962.00	90.20	180.20	3,347.25	-3,929.47	-200.97	3,934.00	0.67	-0.42	-0.53	
7,057.00	89.70	178.70	3,347.33	-4,024.47	-200.06	4,028.91	1.66	-0.53	-1.58	
7,152.00	89.20	179.10	3,348.24	-4,119.44	-198.23	4,123.77	0.67	-0.53	0.42	
7,247.00	90.90	178.90	3,348.16	-4,214.43	-196.57	4,218.64	1.80	1.79	-0.21	
7,342.00	90.70	179.40	3,346.83	-4,309.41	-195.16	4,313.52	0.57	-0.21	0.53	
7,438.00	90.50	180.50	3,345.83	-4,405.40	-195.08	4,409.46	1.16	-0.21	1.15	
7,533.00	90.10	180.40	3,345.33	-4,500.40	-195.83	4,504.43	0.43	-0.42	-0.11	
7,628.00	89.70	181.00	3,345.49	-4,595.39	-196.99	4,599.40	0.76	-0.42	0.63	
7,724.00	89.90	180.00	3,345.83	-4,691.38	-197.83	4,695.37	1.06	0.21	-1.04	
7,818.00	89.50	180.00	3,346.32	-4,785.38	-197.83	4,789.32	0.43	-0.43	0.00	
7,913.00	90.00	180.30	3,346.74	-4,880.38	-198.07	4,884.27	0.61	0.53	0.32	
8,009.00	89.70	179.50	3,346.99	-4,976.38	-197.91	4,980.21	0.89	-0.31	-0.83	
8,104.00	88.90	179.60	3,348.15	-5,071.37	-197.16	5,075.12	0.85	-0.84	0.11	
8,199.00	89.90	179.70	3,349.14	-5,166.36	-196.58	5,170.04	1.06	1.05	0.11	
8,294.00	90.10	179.70	3,349.14	-5,261.36	-196.08	5,264.97	0.21	0.21	0.00	
8,389.00	90.50	178.80	3,348.65	-5,356.35	-194.84	5,359.87	1.04	0.42	-0.95	
8,485.00	89.50	178.30	3,348.65	-5,452.31	-192.41	5,455.70	1.16	-1.04	-0.52	
8,580.00	89.90	180.20	3,349.14	-5,547.30	-191.17	5,550.59	2.04	0.42	2.00	
8,652.02	89.90	180.20	3,349.27	-5,619.32	-191.42	5,622.58	0.00	0.00	0.00	
LTP Hamilton Federal Com #1H Plan #2										
8,652.03	89.90	180.20	3,349.27	-5,619.33	-191.42	5,622.59	0.00	0.00	0.00	
LTP 8652.03 MD/3349.27 TVD -5619.33 S -191.42 W N: 725590.5 E: 636278.5										
8,652.04	89.90	180.20	3,349.27	-5,619.34	-191.42	5,622.59	0.00	0.00	0.00	
LTP Hamilton Federal Com #1H										
8,675.00	89.90	180.20	3,349.31	-5,642.30	-191.50	5,645.55	0.00	0.00	0.00	
8,701.00	90.30	181.00	3,349.26	-5,668.30	-191.77	5,671.54	3.44	1.54	3.08	
Last MWD Survey 8701 MD/3349.26 TVD -5668.3 S -191.77 W N: 725541.5 E: 636278.1										
8,750.00	90.30	181.00	3,349.01	-5,717.29	-192.63	5,720.53	0.00	0.00	0.00	
PTB 8750 MD/3349.01 TVD -5717.29 S -192.63 W N: 725492.5 E: 636277.3 - BHL Hamilton Federal Com #1H - BHL Hamilton Federal Com #										

Microsoft
Survey Report

Company:	Mack Energy	Local Co-ordinate Reference:	Well Hamilton Federal Com #1H
Project:	Chaves County	TVD Reference:	3863.7 + 13 @ 3876.70usft
Site:	Sec 15-T15S-R29E	MD Reference:	3863.7 + 13 @ 3876.70usft
Well:	Hamilton Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.15 Single User Db

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
162.00	162.00	-0.29	0.48	1st MWD Survey
3,379.00	3,218.37	-385.77	-194.57	Cross Lease Line 3379' MD/3218.37 TVD -385.77 S -194.57 W N: 730824.1 E:
3,503.81	3,281.64	-486.25	-232.07	FTP 3503.81 MD/3281.64 TVD -486.25 S -232.07 W N: 730723.6 E: 636237.8
8,652.03	3,349.27	-5,619.33	-191.42	LTP 8652.03 MD/3349.27 TVD -5619.33 S -191.42 W N: 725590.5 E: 636278.5
8,701.00	3,349.26	-5,668.30	-191.77	Last MWD Survey 8701 MD/3349.26 TVD -5668.3 S -191.77 W N: 725541.5 E:
8,750.00	3,349.01	-5,717.29	-192.63	PTB 8750 MD/3349.01 TVD -5717.29 S -192.63 W N: 725492.5 E: 636277.3

Checked By: _____	Approved By: _____	Date: _____
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNM OIL INFORMATION
ARTESIA DISTRICT
Artesia
OCT 24 2019FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM05575631a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
MACK ENERGY CORPORATION E-Mail: DWEAVER@MEC.COM

Contact: DEANA WEAVER

8. Lease Name and Well No.
HAMILTON FEDERAL COM 1H3. Address P.O. BOX 960
ARTESIA, NM 88211-09603a. Phone No. (include area code)
Ph: 575-748-12889. API Well No.
30-005-64307-00-S1

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface SWSW 383FSL 598FWL 33.009712 N Lat, 104.022995 W Lon
Sec 15 T15S R29E Mer NMP
At top prod interval reported below NWNW 127FNL 358FWL
Sec 22 T15S R29E Mer NMP
At total depth SWSW 2FSL 329FWL10. Field and Pool, or Exploratory
ROUND TANK-SAN ANDRES11. Sec., T., R., M., or Block and Survey
or Area Sec 15 T15S R29E Mer NMP12. County or Parish
CHAVES13. State
NM14. Date Spudded
08/03/201915. Date T.D. Reached
08/17/201916. Date Completed
☐ D & A ☒ Ready to Prod.
10/04/201917. Elevations (DF, KB, RT, GL)*
3863 GL18. Total Depth: MD 8750
TVD 334919. Plug Back T.D.: MD 8701
TVD 334920. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	48.0	0	220		425		0	
12.250	9.625 J-55	36.0	0	1200		465		0	
8.750	5.500 P-110	17.0	0	5289		1575		187	
8.750	7.000 P-110	26.0	5289	8750		350		187	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
✓ 3.500	2456							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) SAN ANDRES	3699	8650	✓ 3699 TO 8650	0.410	900	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
3699 TO 8650	1205BBLs 2000GALS 15% ACID, 96357BBLs X-LINKS, 6609BBLs SW, 387,321# 100 MESH, 650,132# 30/50SW

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
10/14/2019	10/16/2010	24	→	14.0	26.0	2224.0	35.0	0.60	ELECTRIC PUMPING UNIT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→	14	26	2224	1857	OPEN	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #489153 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Reclamation due: 4/14/2020

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)

SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
QUEEN SAN ANDRES	1798 3699	1815 8650	SAND, OIL/GAS/WATER DOLOMITE, OIL/GAS/WATER	YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES	1055 1288 1778 2169 2482

32. Additional remarks (include plugging procedure):

9/10-10/3/2019 PERFORATED 3699-8650' W/ .41,900 HOLES. FRAC W/ 1205 BBLS & 2000 GALS 15% ACID, 96,357BBLS X-LINKS, 6609BBLS SW, 387,321# 100 MESH, 650,132# 30/50 WS, 3,208,671# 20/40 WS, 608,457# SLC 20/40. RIH w/ 1jt 2 7/8, 74jts 3 1/2 tubing @ 2456', 123m900 Stator.

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7. Other | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #489153 Verified by the BLM Well Information System.

For MACK ENERGY CORPORATION, sent to the Roswell

Committed to AFMSS for processing by JENNIFER SANCHEZ on 10/22/2019 (20JS0007SE)

Name (please print) DEANA WEAVER

Title PRODUCTION CLERK

Signature (Electronic Submission)

Date 10/22/2019

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****