

Well Name: SAN JUAN 32 7 603 FEDERAL COM	Well Location: T32N / R07W / SEC 26 / SWSW / 36.94733 / -107.544514	County or Parish/State: SAN JUAN / NM
Well Number: 613H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078543	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: HILCORP ENERGY COMPANY	

Notice of Intent

Sundry ID: 2786017

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 04/19/2024	Time Sundry Submitted: 02:27
Date proposed operation will begin: 05/01/2024	

Procedure Description: Hilcorp Energy Company requests to revise the drilling plans on the above mentioned well. Please see the attached revised, plat, tech plans and directional drilling plans.

NOI Attachments

Procedure Description

- San_Juan_32_7_603_Federal_Com_613H_Plan_2_20240419142653.pdf
- SJ_32_7_603_FED_COM_613H_REVISED_PLAT_20240419142653.pdf
- San_Juan_32_7_603_Federal_Com_613H____Drilling_Technical_Plan____Rev_4_20240419142652.pdf

Received by OCD: 4/25/2024 1:42:10 PM

Page 2 of 19

Well Name: SAN JUAN 32 7 603 FEDERAL COM	Well Location: T32N / R07W / SEC 26 / SWSW / 36.94733 / -107.544514	County or Parish/State: SAN JUAN / NM
Well Number: 613H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078543	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: HILCORP ENERGY COMPANY	

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: AMANDA WALKER	Signed on: APR 19, 2024 02:26 PM
Name: HILCORP ENERGY COMPANY	
Title: Operations/Regulatory Technician	
Street Address: 1111 TRAVIS ST	
City: HOUSTON	State: TX
Phone: (346) 237-2177	
Email address: MWALKER@HILCORP.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647742	BLM POC Email Address: krennick@blm.gov
Disposition: Approved	Disposition Date: 04/25/2024
Signature: s/ Jeff Tafoya	

District I
1000 Rio Brazos Drive, Artesia, NM 88210
Phone: (505) 393-6161 Fax: (505) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 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 Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 97232	³ Pool Name BASIN MANCOS
⁴ Property Code	⁵ Property Name SAN JUAN 32 7 603 FEDERAL COM	⁶ Well Number 613H
⁷ GRID No. 372171	⁸ Operator Name HILCORP ENERGY COMPANY	⁹ Elevation 6748'

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	26	32N	7W		1034	SOUTH	259	WEST	SAN JUAN

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
0	29	32N	7W		168	SOUTH	2448	EAST	SAN JUAN

¹² Dedicated Acres 1593.48	S/2 - Section 27, T32N, R7W S/2 - Section 28, T32N, R7W SE/4 - Section 29, T32N, R7W NE/4 - Section 32, T32N, R7W N/2 - Section 33, T32N, R7W N/2 - Section 34, T32N, R7W
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¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

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.

Amanda Walker 4/19/2024
Signature Date
Amanda Walker
Printed Name
mwalker@hilcorp.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

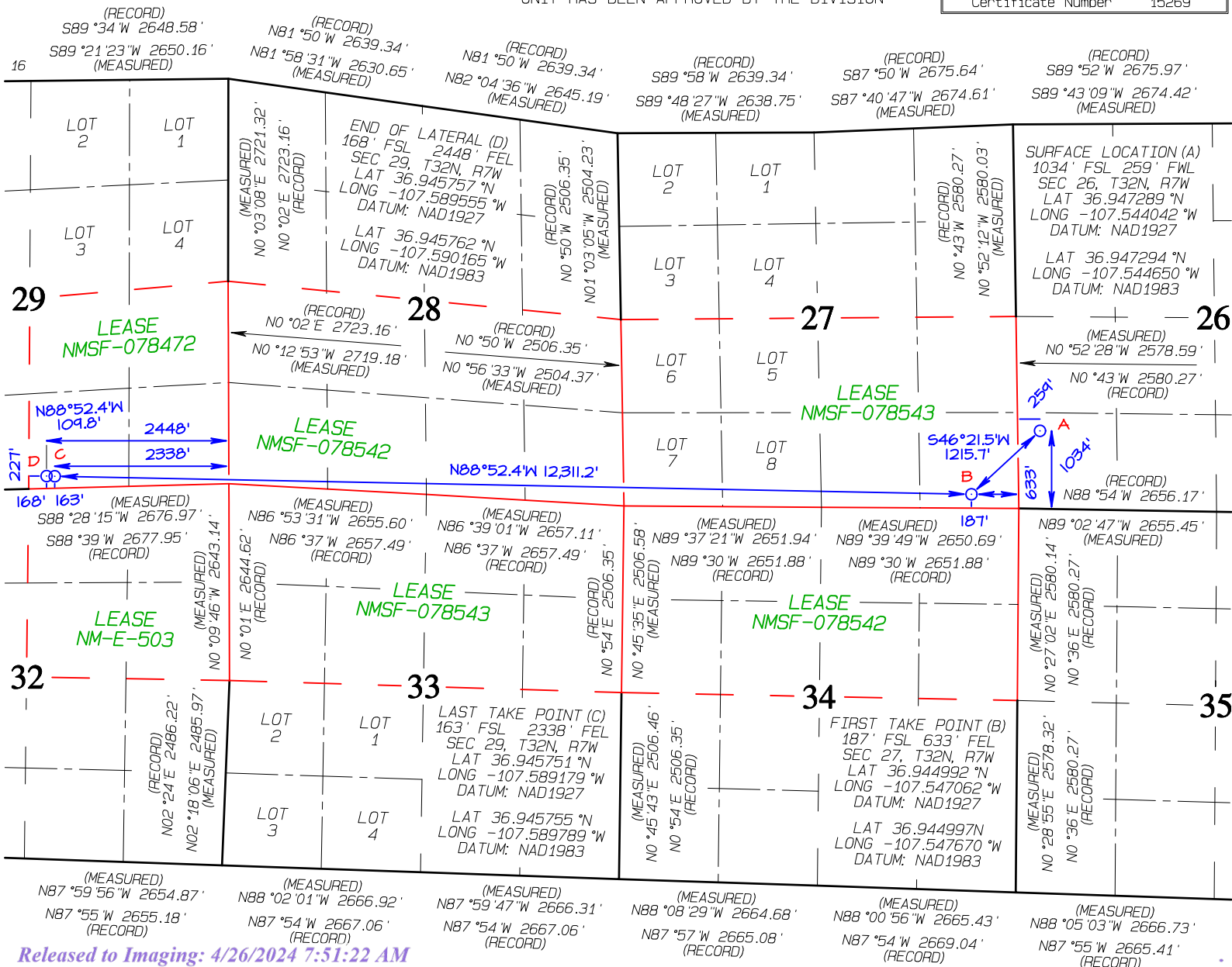
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: FEBRUARY 1, 2024
Date of Survey: JULY 27, 2022

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269





Company: Hilcorp Energy Corp.
Project: San Juan, NM NAD27
Site: Burnt Mesa Pad
Well: San Juan 32 7 603 Federal Com 613H
Wellbore: OH
Design: Plan #2

PROJECT DETAILS: San Juan, NM NAD27

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level
Local North: True



WELL DETAILS: San Juan 32 7 603 Federal Com 613H

GL 6748' & RKB 17' @ 6765.00ft
+N/-S+E/-W Northing Easting Longitude
0.00 0.00 2164208.05 584535.85 36.9472890 -107.5440420 A07

Plan: Plan #2 (San Juan 32 7 603 Federal Com 613H/OH)

Created By: Janie Collin Date: 13:26, January 12 2024



Azimuths to True North
Magnetic North: 8°

Magnetic Field
Strength: 49615 nT
Dip Angle: 63.3°
Date: 12/31/2021
Model: HDGM2021_FIT

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SJFC 613H LP Rev1	7321.00	-836.41	-882.82	2163368.97	583655.58	36.9449915	-107.5470630
SJFC 613H BHL Rev1	7290.00	-554.46	-13300.00	2163613.23	571237.62	36.9457573	-107.5895549

SECTION DETAILS

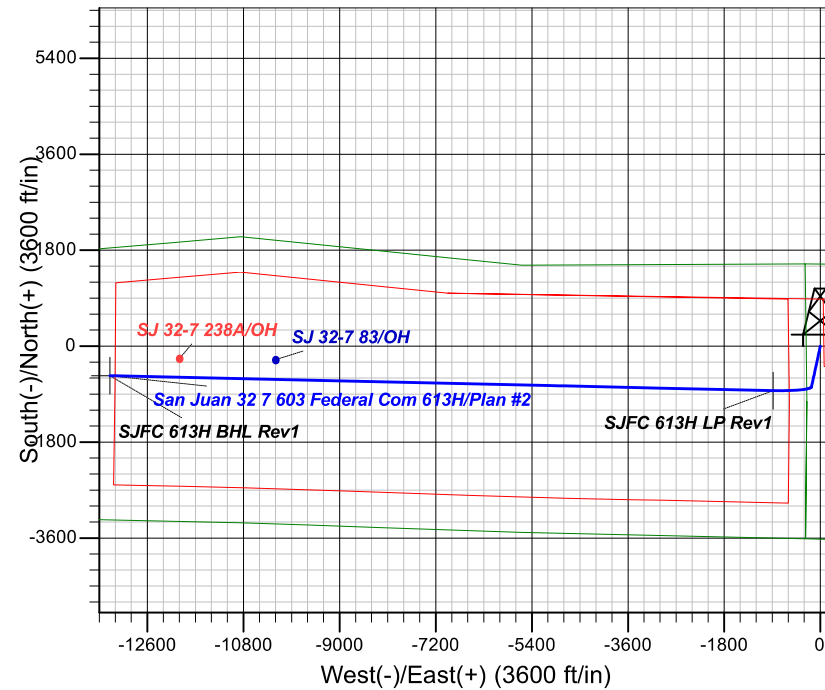
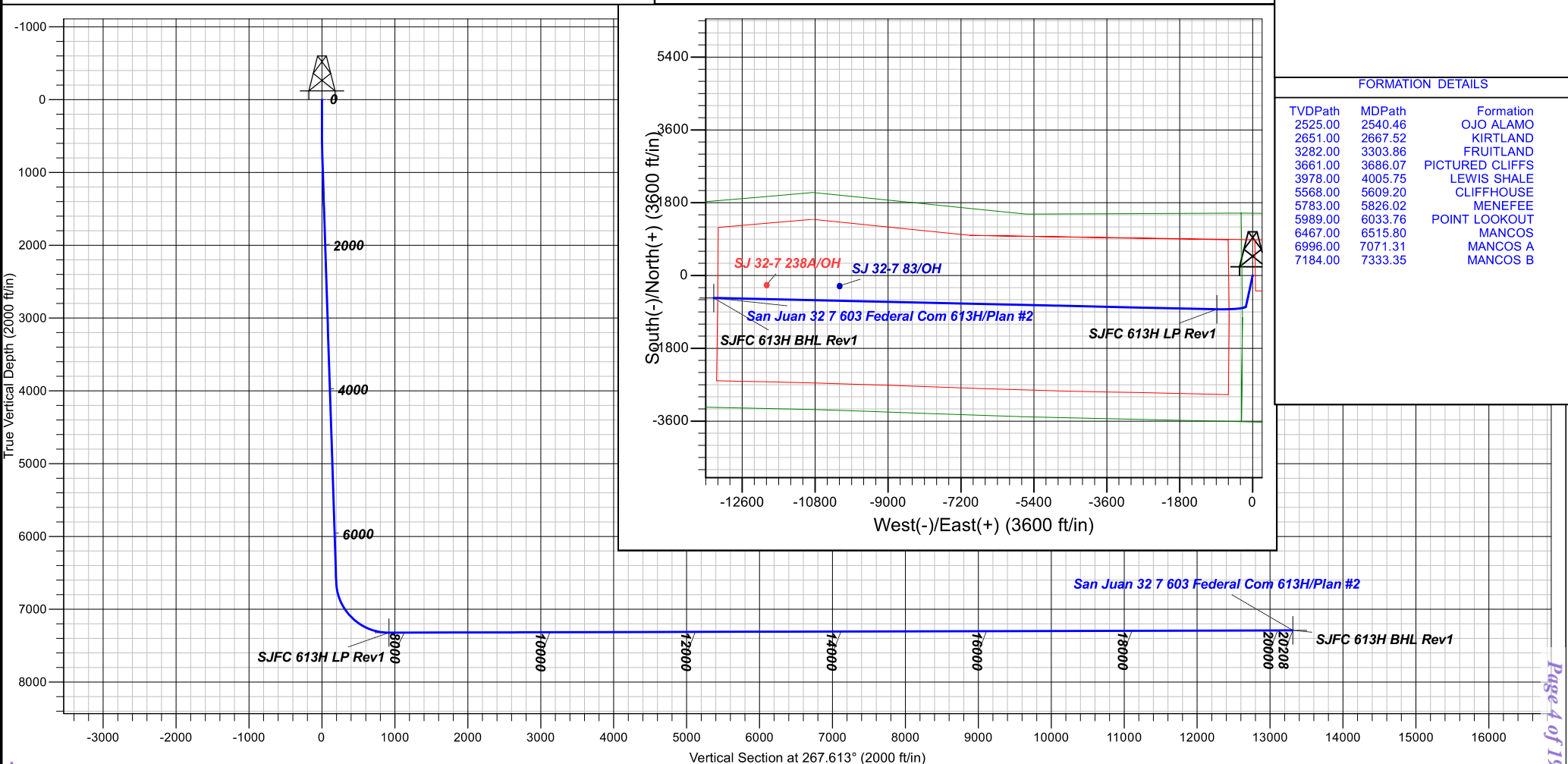
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00
821.31	7.43	192.064	820.27	-23.50	-5.02	2.00	192.06	6.00
6677.94	7.43	192.064	6627.78	-763.74	-163.22	0.00	0.00	194.89
7787.43	90.14	271.301	7321.00	-836.41	-882.82	8.00	79.31	916.89
20207.85	90.14	271.301	7290.00	-554.46	-13300.00	0.00	0.00	13311.55

CASING DETAILS

No casing data is available

FORMATION DETAILS

TVDPath	MDPath	Formation
2525.00	2540.46	OJO ALAMO
2651.00	2667.52	KIRTLAND
3282.00	3303.86	FRUITLAND
3661.00	3686.07	PICTURED CLIFFS
3978.00	4005.75	LEWIS SHALE
5568.00	5609.20	CLIFFHOUSE
5783.00	5826.02	MENEFEE
5989.00	6033.76	POINT LOOKOUT
6467.00	6515.80	MANCOS
6996.00	7071.31	MANCOS A
7184.00	7333.35	MANCOS B





Hilcorp Energy Corp.

San Juan, NM NAD27

Burnt Mesa Pad

San Juan 32 7 603 Federal Com 613H - Slot A07

OH

Plan: Plan #2

Standard Planning Report

12 January, 2024





Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well San Juan 32 7 603 Federal Com 613H - Slot A07
Company:	Hilcorp Energy Corp.	TVD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Site:	Burnt Mesa Pad	North Reference:	True
Well:	San Juan 32 7 603 Federal Com 613H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Project	San Juan, NM NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site		Burnt Mesa Pad				
Site Position:		Northing:	2,164,058.07	usft	Latitude:	36.9468770
From:	Lat/Long	Easting:	584,538.07	usft	Longitude:	-107.5440360
Position Uncertainty:		0.00	ft	Slot Radius:	13.20	in

Well	San Juan 32 7 603 Federal Com 613H - Slot A07					
Well Position	+N/-S	0.00 ft	Northing:	2,164,208.05 usft	Latitude:	36.9472890
	+E/-W	0.00 ft	Easting:	584,535.86 usft	Longitude:	-107.5440420
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,748.00 ft
Grid Convergence:		0.17 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021_FILE	12/31/2021	8.77	63.38	49,615.40000000

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	267.613

Plan Survey Tool Program	Date	1/10/2024		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,207.85 Plan #2 (OH)	MWD+HDGM	
			OWSG MWD + HDGM	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	0.00	
821.31	7.43	192.064	820.27	-23.50	-5.02	2.00	2.00	0.00	192.06	
6,677.94	7.43	192.064	6,627.78	-763.74	-163.22	0.00	0.00	0.00	0.00	
7,787.43	90.14	271.301	7,321.00	-836.41	-882.82	8.00	7.46	7.14	79.31	SJFC 613H LP Rev1
20,207.85	90.14	271.301	7,290.00	-554.46	-13,300.00	0.00	0.00	0.00	0.00	SJFC 613H BHL Rev



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well San Juan 32 7 603 Federal Com 613H - Slot A07
Company:	Hilcorp Energy Corp.	TVD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Site:	Burnt Mesa Pad	North Reference:	True
Well:	San Juan 32 7 603 Federal Com 613H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	1.00	192.064	500.00	-0.43	-0.09	0.11	2.00	2.00	0.00
600.00	3.00	192.064	599.93	-3.84	-0.82	0.98	2.00	2.00	0.00
700.00	5.00	192.064	699.68	-10.66	-2.28	2.72	2.00	2.00	0.00
800.00	7.00	192.064	799.13	-20.88	-4.46	5.33	2.00	2.00	0.00
821.31	7.43	192.064	820.27	-23.50	-5.02	6.00	2.00	2.00	0.00
900.00	7.43	192.064	898.30	-33.44	-7.15	8.53	0.00	0.00	0.00
1,000.00	7.43	192.064	997.46	-46.08	-9.85	11.76	0.00	0.00	0.00
1,100.00	7.43	192.064	1,096.62	-58.72	-12.55	14.99	0.00	0.00	0.00
1,200.00	7.43	192.064	1,195.78	-71.36	-15.25	18.21	0.00	0.00	0.00
1,300.00	7.43	192.064	1,294.95	-84.00	-17.95	21.44	0.00	0.00	0.00
1,400.00	7.43	192.064	1,394.11	-96.64	-20.65	24.66	0.00	0.00	0.00
1,500.00	7.43	192.064	1,493.27	-109.28	-23.36	27.89	0.00	0.00	0.00
1,600.00	7.43	192.064	1,592.43	-121.92	-26.06	31.11	0.00	0.00	0.00
1,700.00	7.43	192.064	1,691.59	-134.56	-28.76	34.34	0.00	0.00	0.00
1,800.00	7.43	192.064	1,790.75	-147.20	-31.46	37.56	0.00	0.00	0.00
1,900.00	7.43	192.064	1,889.91	-159.84	-34.16	40.79	0.00	0.00	0.00
2,000.00	7.43	192.064	1,989.07	-172.48	-36.86	44.01	0.00	0.00	0.00
2,100.00	7.43	192.064	2,088.24	-185.12	-39.56	47.24	0.00	0.00	0.00
2,200.00	7.43	192.064	2,187.40	-197.76	-42.26	50.46	0.00	0.00	0.00
2,300.00	7.43	192.064	2,286.56	-210.40	-44.97	53.69	0.00	0.00	0.00
2,400.00	7.43	192.064	2,385.72	-223.04	-47.67	56.91	0.00	0.00	0.00
2,500.00	7.43	192.064	2,484.88	-235.68	-50.37	60.14	0.00	0.00	0.00
2,600.00	7.43	192.064	2,584.04	-248.31	-53.07	63.37	0.00	0.00	0.00
2,700.00	7.43	192.064	2,683.20	-260.95	-55.77	66.59	0.00	0.00	0.00
2,800.00	7.43	192.064	2,782.36	-273.59	-58.47	69.82	0.00	0.00	0.00
2,900.00	7.43	192.064	2,881.53	-286.23	-61.17	73.04	0.00	0.00	0.00
3,000.00	7.43	192.064	2,980.69	-298.87	-63.87	76.27	0.00	0.00	0.00
3,100.00	7.43	192.064	3,079.85	-311.51	-66.58	79.49	0.00	0.00	0.00
3,200.00	7.43	192.064	3,179.01	-324.15	-69.28	82.72	0.00	0.00	0.00
3,300.00	7.43	192.064	3,278.17	-336.79	-71.98	85.94	0.00	0.00	0.00
3,400.00	7.43	192.064	3,377.33	-349.43	-74.68	89.17	0.00	0.00	0.00
3,500.00	7.43	192.064	3,476.49	-362.07	-77.38	92.39	0.00	0.00	0.00
3,600.00	7.43	192.064	3,575.65	-374.71	-80.08	95.62	0.00	0.00	0.00
3,700.00	7.43	192.064	3,674.82	-387.35	-82.78	98.84	0.00	0.00	0.00
3,800.00	7.43	192.064	3,773.98	-399.99	-85.48	102.07	0.00	0.00	0.00
3,900.00	7.43	192.064	3,873.14	-412.63	-88.18	105.30	0.00	0.00	0.00
4,000.00	7.43	192.064	3,972.30	-425.27	-90.89	108.52	0.00	0.00	0.00
4,100.00	7.43	192.064	4,071.46	-437.91	-93.59	111.75	0.00	0.00	0.00
4,200.00	7.43	192.064	4,170.62	-450.54	-96.29	114.97	0.00	0.00	0.00
4,300.00	7.43	192.064	4,269.78	-463.18	-98.99	118.20	0.00	0.00	0.00
4,400.00	7.43	192.064	4,368.94	-475.82	-101.69	121.42	0.00	0.00	0.00
4,500.00	7.43	192.064	4,468.11	-488.46	-104.39	124.65	0.00	0.00	0.00
4,600.00	7.43	192.064	4,567.27	-501.10	-107.09	127.87	0.00	0.00	0.00
4,700.00	7.43	192.064	4,666.43	-513.74	-109.79	131.10	0.00	0.00	0.00
4,800.00	7.43	192.064	4,765.59	-526.38	-112.50	134.32	0.00	0.00	0.00
4,900.00	7.43	192.064	4,864.75	-539.02	-115.20	137.55	0.00	0.00	0.00
5,000.00	7.43	192.064	4,963.91	-551.66	-117.90	140.77	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



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Company:	Hilcorp Energy Corp.	TVD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Site:	Burnt Mesa Pad	North Reference:	True
Well:	San Juan 32 7 603 Federal Com 613H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,100.00	7.43	192.064	5,063.07	-564.30	-120.60	144.00	0.00	0.00	0.00	
5,200.00	7.43	192.064	5,162.23	-576.94	-123.30	147.23	0.00	0.00	0.00	
5,300.00	7.43	192.064	5,261.40	-589.58	-126.00	150.45	0.00	0.00	0.00	
5,400.00	7.43	192.064	5,360.56	-602.22	-128.70	153.68	0.00	0.00	0.00	
5,500.00	7.43	192.064	5,459.72	-614.86	-131.40	156.90	0.00	0.00	0.00	
5,600.00	7.43	192.064	5,558.88	-627.50	-134.11	160.13	0.00	0.00	0.00	
5,700.00	7.43	192.064	5,658.04	-640.14	-136.81	163.35	0.00	0.00	0.00	
5,800.00	7.43	192.064	5,757.20	-652.78	-139.51	166.58	0.00	0.00	0.00	
5,900.00	7.43	192.064	5,856.36	-665.41	-142.21	169.80	0.00	0.00	0.00	
6,000.00	7.43	192.064	5,955.52	-678.05	-144.91	173.03	0.00	0.00	0.00	
6,100.00	7.43	192.064	6,054.69	-690.69	-147.61	176.25	0.00	0.00	0.00	
6,200.00	7.43	192.064	6,153.85	-703.33	-150.31	179.48	0.00	0.00	0.00	
6,300.00	7.43	192.064	6,253.01	-715.97	-153.01	182.70	0.00	0.00	0.00	
6,400.00	7.43	192.064	6,352.17	-728.61	-155.72	185.93	0.00	0.00	0.00	
6,500.00	7.43	192.064	6,451.33	-741.25	-158.42	189.15	0.00	0.00	0.00	
6,600.00	7.43	192.064	6,550.49	-753.89	-161.12	192.38	0.00	0.00	0.00	
6,677.94	7.43	192.064	6,627.78	-763.74	-163.22	194.89	0.00	0.00	0.00	
6,700.00	7.94	204.711	6,649.64	-766.52	-164.16	195.94	8.00	2.35	57.33	
6,800.00	13.30	238.486	6,747.98	-778.83	-176.87	209.16	8.00	5.36	33.78	
6,900.00	20.44	251.193	6,843.64	-790.49	-203.26	236.01	8.00	7.14	12.71	
7,000.00	28.04	257.373	6,934.77	-801.28	-242.79	275.95	8.00	7.60	6.18	
7,100.00	35.80	261.058	7,019.59	-810.98	-294.71	328.23	8.00	7.76	3.68	
7,200.00	43.64	263.567	7,096.45	-819.41	-357.99	391.81	8.00	7.84	2.51	
7,300.00	51.52	265.442	7,163.86	-826.39	-431.42	465.47	8.00	7.88	1.87	
7,400.00	59.43	266.944	7,220.49	-831.81	-513.56	547.76	8.00	7.90	1.50	
7,500.00	67.35	268.219	7,265.25	-835.54	-602.82	637.10	8.00	7.92	1.27	
7,600.00	75.27	269.354	7,297.27	-837.53	-697.44	731.72	8.00	7.93	1.13	
7,700.00	83.21	270.408	7,315.93	-837.72	-795.61	829.81	8.00	7.93	1.05	
7,787.43	90.14	271.301	7,321.00	-836.41	-882.82	916.89	8.00	7.93	1.02	
7,800.00	90.14	271.301	7,320.97	-836.13	-895.39	929.44	0.00	0.00	0.00	
7,900.00	90.14	271.301	7,320.72	-833.86	-995.36	1,029.23	0.00	0.00	0.00	
8,000.00	90.14	271.301	7,320.47	-831.59	-1,095.34	1,129.03	0.00	0.00	0.00	
8,100.00	90.14	271.301	7,320.22	-829.32	-1,195.31	1,228.82	0.00	0.00	0.00	
8,200.00	90.14	271.301	7,319.97	-827.05	-1,295.29	1,328.61	0.00	0.00	0.00	
8,300.00	90.14	271.301	7,319.72	-824.78	-1,395.26	1,428.40	0.00	0.00	0.00	
8,400.00	90.14	271.301	7,319.47	-822.51	-1,495.23	1,528.20	0.00	0.00	0.00	
8,500.00	90.14	271.301	7,319.22	-820.24	-1,595.21	1,627.99	0.00	0.00	0.00	
8,600.00	90.14	271.301	7,318.97	-817.97	-1,695.18	1,727.78	0.00	0.00	0.00	
8,700.00	90.14	271.301	7,318.72	-815.70	-1,795.16	1,827.57	0.00	0.00	0.00	
8,800.00	90.14	271.301	7,318.47	-813.43	-1,895.13	1,927.37	0.00	0.00	0.00	
8,900.00	90.14	271.301	7,318.22	-811.16	-1,995.10	2,027.16	0.00	0.00	0.00	
9,000.00	90.14	271.301	7,317.97	-808.89	-2,095.08	2,126.95	0.00	0.00	0.00	
9,100.00	90.14	271.301	7,317.72	-806.62	-2,195.05	2,226.74	0.00	0.00	0.00	
9,200.00	90.14	271.301	7,317.47	-804.35	-2,295.03	2,326.54	0.00	0.00	0.00	
9,300.00	90.14	271.301	7,317.22	-802.08	-2,395.00	2,426.33	0.00	0.00	0.00	
9,400.00	90.14	271.301	7,316.98	-799.81	-2,494.97	2,526.12	0.00	0.00	0.00	
9,500.00	90.14	271.301	7,316.73	-797.54	-2,594.95	2,625.91	0.00	0.00	0.00	
9,600.00	90.14	271.301	7,316.48	-795.27	-2,694.92	2,725.71	0.00	0.00	0.00	
9,700.00	90.14	271.301	7,316.23	-793.00	-2,794.90	2,825.50	0.00	0.00	0.00	
9,800.00	90.14	271.301	7,315.98	-790.73	-2,894.87	2,925.29	0.00	0.00	0.00	
9,900.00	90.14	271.301	7,315.73	-788.46	-2,994.84	3,025.09	0.00	0.00	0.00	
10,000.00	90.14	271.301	7,315.48	-786.19	-3,094.82	3,124.88	0.00	0.00	0.00	
10,100.00	90.14	271.301	7,315.23	-783.92	-3,194.79	3,224.67	0.00	0.00	0.00	



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well San Juan 32 7 603 Federal Com 613H - Slot A07
Company:	Hilcorp Energy Corp.	TVD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Site:	Burnt Mesa Pad	North Reference:	True
Well:	San Juan 32 7 603 Federal Com 613H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,200.00	90.14	271.301	7,314.98	-781.65	-3,294.76	3,324.46	0.00	0.00	0.00	
10,300.00	90.14	271.301	7,314.73	-779.38	-3,394.74	3,424.26	0.00	0.00	0.00	
10,400.00	90.14	271.301	7,314.48	-777.11	-3,494.71	3,524.05	0.00	0.00	0.00	
10,500.00	90.14	271.301	7,314.23	-774.84	-3,594.69	3,623.84	0.00	0.00	0.00	
10,600.00	90.14	271.301	7,313.98	-772.57	-3,694.66	3,723.63	0.00	0.00	0.00	
10,700.00	90.14	271.301	7,313.73	-770.30	-3,794.63	3,823.43	0.00	0.00	0.00	
10,800.00	90.14	271.301	7,313.48	-768.03	-3,894.61	3,923.22	0.00	0.00	0.00	
10,900.00	90.14	271.301	7,313.23	-765.76	-3,994.58	4,023.01	0.00	0.00	0.00	
11,000.00	90.14	271.301	7,312.98	-763.49	-4,094.56	4,122.80	0.00	0.00	0.00	
11,100.00	90.14	271.301	7,312.73	-761.22	-4,194.53	4,222.60	0.00	0.00	0.00	
11,200.00	90.14	271.301	7,312.48	-758.95	-4,294.50	4,322.39	0.00	0.00	0.00	
11,300.00	90.14	271.301	7,312.23	-756.68	-4,394.48	4,422.18	0.00	0.00	0.00	
11,400.00	90.14	271.301	7,311.98	-754.41	-4,494.45	4,521.97	0.00	0.00	0.00	
11,500.00	90.14	271.301	7,311.73	-752.14	-4,594.43	4,621.77	0.00	0.00	0.00	
11,600.00	90.14	271.301	7,311.48	-749.87	-4,694.40	4,721.56	0.00	0.00	0.00	
11,700.00	90.14	271.301	7,311.23	-747.60	-4,794.37	4,821.35	0.00	0.00	0.00	
11,800.00	90.14	271.301	7,310.99	-745.33	-4,894.35	4,921.14	0.00	0.00	0.00	
11,900.00	90.14	271.301	7,310.74	-743.06	-4,994.32	5,020.94	0.00	0.00	0.00	
12,000.00	90.14	271.301	7,310.49	-740.79	-5,094.30	5,120.73	0.00	0.00	0.00	
12,100.00	90.14	271.301	7,310.24	-738.52	-5,194.27	5,220.52	0.00	0.00	0.00	
12,200.00	90.14	271.301	7,309.99	-736.25	-5,294.24	5,320.32	0.00	0.00	0.00	
12,300.00	90.14	271.301	7,309.74	-733.98	-5,394.22	5,420.11	0.00	0.00	0.00	
12,400.00	90.14	271.301	7,309.49	-731.71	-5,494.19	5,519.90	0.00	0.00	0.00	
12,500.00	90.14	271.301	7,309.24	-729.44	-5,594.16	5,619.69	0.00	0.00	0.00	
12,600.00	90.14	271.301	7,308.99	-727.17	-5,694.14	5,719.49	0.00	0.00	0.00	
12,700.00	90.14	271.301	7,308.74	-724.90	-5,794.11	5,819.28	0.00	0.00	0.00	
12,800.00	90.14	271.301	7,308.49	-722.63	-5,894.09	5,919.07	0.00	0.00	0.00	
12,900.00	90.14	271.301	7,308.24	-720.36	-5,994.06	6,018.86	0.00	0.00	0.00	
13,000.00	90.14	271.301	7,307.99	-718.09	-6,094.03	6,118.66	0.00	0.00	0.00	
13,100.00	90.14	271.301	7,307.74	-715.82	-6,194.01	6,218.45	0.00	0.00	0.00	
13,200.00	90.14	271.301	7,307.49	-713.55	-6,293.98	6,318.24	0.00	0.00	0.00	
13,300.00	90.14	271.301	7,307.24	-711.28	-6,393.96	6,418.03	0.00	0.00	0.00	
13,400.00	90.14	271.301	7,306.99	-709.00	-6,493.93	6,517.83	0.00	0.00	0.00	
13,500.00	90.14	271.301	7,306.74	-706.73	-6,593.90	6,617.62	0.00	0.00	0.00	
13,600.00	90.14	271.301	7,306.49	-704.46	-6,693.88	6,717.41	0.00	0.00	0.00	
13,700.00	90.14	271.301	7,306.24	-702.19	-6,793.85	6,817.20	0.00	0.00	0.00	
13,800.00	90.14	271.301	7,305.99	-699.92	-6,893.83	6,917.00	0.00	0.00	0.00	
13,900.00	90.14	271.301	7,305.74	-697.65	-6,993.80	7,016.79	0.00	0.00	0.00	
14,000.00	90.14	271.301	7,305.49	-695.38	-7,093.77	7,116.58	0.00	0.00	0.00	
14,100.00	90.14	271.301	7,305.24	-693.11	-7,193.75	7,216.37	0.00	0.00	0.00	
14,200.00	90.14	271.301	7,305.00	-690.84	-7,293.72	7,316.17	0.00	0.00	0.00	
14,300.00	90.14	271.301	7,304.75	-688.57	-7,393.70	7,415.96	0.00	0.00	0.00	
14,400.00	90.14	271.301	7,304.50	-686.30	-7,493.67	7,515.75	0.00	0.00	0.00	
14,500.00	90.14	271.301	7,304.25	-684.03	-7,593.64	7,615.55	0.00	0.00	0.00	
14,600.00	90.14	271.301	7,304.00	-681.76	-7,693.62	7,715.34	0.00	0.00	0.00	
14,700.00	90.14	271.301	7,303.75	-679.49	-7,793.59	7,815.13	0.00	0.00	0.00	
14,800.00	90.14	271.301	7,303.50	-677.22	-7,893.57	7,914.92	0.00	0.00	0.00	
14,900.00	90.14	271.301	7,303.25	-674.95	-7,993.54	8,014.72	0.00	0.00	0.00	
15,000.00	90.14	271.301	7,303.00	-672.68	-8,093.51	8,114.51	0.00	0.00	0.00	
15,100.00	90.14	271.301	7,302.75	-670.41	-8,193.49	8,214.30	0.00	0.00	0.00	
15,200.00	90.14	271.301	7,302.50	-668.14	-8,293.46	8,314.09	0.00	0.00	0.00	
15,300.00	90.14	271.301	7,302.25	-665.87	-8,393.43	8,413.89	0.00	0.00	0.00	
15,400.00	90.14	271.301	7,302.00	-663.60	-8,493.41	8,513.68	0.00	0.00	0.00	



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well San Juan 32 7 603 Federal Com 613H - Slot A07
Company:	Hilcorp Energy Corp.	TVD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Site:	Burnt Mesa Pad	North Reference:	True
Well:	San Juan 32 7 603 Federal Com 613H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,500.00	90.14	271.301	7,301.75	-661.33	-8,593.38	8,613.47	0.00	0.00	0.00
15,600.00	90.14	271.301	7,301.50	-659.06	-8,693.36	8,713.26	0.00	0.00	0.00
15,700.00	90.14	271.301	7,301.25	-656.79	-8,793.33	8,813.06	0.00	0.00	0.00
15,800.00	90.14	271.301	7,301.00	-654.52	-8,893.30	8,912.85	0.00	0.00	0.00
15,900.00	90.14	271.301	7,300.75	-652.25	-8,993.28	9,012.64	0.00	0.00	0.00
16,000.00	90.14	271.301	7,300.50	-649.98	-9,093.25	9,112.43	0.00	0.00	0.00
16,100.00	90.14	271.301	7,300.25	-647.71	-9,193.23	9,212.23	0.00	0.00	0.00
16,200.00	90.14	271.301	7,300.00	-645.44	-9,293.20	9,312.02	0.00	0.00	0.00
16,300.00	90.14	271.301	7,299.75	-643.17	-9,393.17	9,411.81	0.00	0.00	0.00
16,400.00	90.14	271.301	7,299.50	-640.90	-9,493.15	9,511.60	0.00	0.00	0.00
16,500.00	90.14	271.301	7,299.25	-638.63	-9,593.12	9,611.40	0.00	0.00	0.00
16,600.00	90.14	271.301	7,299.00	-636.36	-9,693.10	9,711.19	0.00	0.00	0.00
16,700.00	90.14	271.301	7,298.76	-634.09	-9,793.07	9,810.98	0.00	0.00	0.00
16,800.00	90.14	271.301	7,298.51	-631.82	-9,893.04	9,910.77	0.00	0.00	0.00
16,900.00	90.14	271.301	7,298.26	-629.55	-9,993.02	10,010.57	0.00	0.00	0.00
17,000.00	90.14	271.301	7,298.01	-627.28	-10,092.99	10,110.36	0.00	0.00	0.00
17,100.00	90.14	271.301	7,297.76	-625.01	-10,192.97	10,210.15	0.00	0.00	0.00
17,200.00	90.14	271.301	7,297.51	-622.74	-10,292.94	10,309.95	0.00	0.00	0.00
17,300.00	90.14	271.301	7,297.26	-620.47	-10,392.91	10,409.74	0.00	0.00	0.00
17,400.00	90.14	271.301	7,297.01	-618.20	-10,492.89	10,509.53	0.00	0.00	0.00
17,500.00	90.14	271.301	7,296.76	-615.93	-10,592.86	10,609.32	0.00	0.00	0.00
17,600.00	90.14	271.301	7,296.51	-613.66	-10,692.83	10,709.12	0.00	0.00	0.00
17,700.00	90.14	271.301	7,296.26	-611.39	-10,792.81	10,808.91	0.00	0.00	0.00
17,800.00	90.14	271.301	7,296.01	-609.12	-10,892.78	10,908.70	0.00	0.00	0.00
17,900.00	90.14	271.301	7,295.76	-606.85	-10,992.76	11,008.49	0.00	0.00	0.00
18,000.00	90.14	271.301	7,295.51	-604.58	-11,092.73	11,108.29	0.00	0.00	0.00
18,100.00	90.14	271.301	7,295.26	-602.31	-11,192.70	11,208.08	0.00	0.00	0.00
18,200.00	90.14	271.301	7,295.01	-600.04	-11,292.68	11,307.87	0.00	0.00	0.00
18,300.00	90.14	271.301	7,294.76	-597.77	-11,392.65	11,407.66	0.00	0.00	0.00
18,400.00	90.14	271.301	7,294.51	-595.50	-11,492.63	11,507.46	0.00	0.00	0.00
18,500.00	90.14	271.301	7,294.26	-593.23	-11,592.60	11,607.25	0.00	0.00	0.00
18,600.00	90.14	271.301	7,294.01	-590.96	-11,692.57	11,707.04	0.00	0.00	0.00
18,700.00	90.14	271.301	7,293.76	-588.69	-11,792.55	11,806.83	0.00	0.00	0.00
18,800.00	90.14	271.301	7,293.51	-586.42	-11,892.52	11,906.63	0.00	0.00	0.00
18,900.00	90.14	271.301	7,293.26	-584.15	-11,992.50	12,006.42	0.00	0.00	0.00
19,000.00	90.14	271.301	7,293.01	-581.88	-12,092.47	12,106.21	0.00	0.00	0.00
19,100.00	90.14	271.301	7,292.77	-579.61	-12,192.44	12,206.00	0.00	0.00	0.00
19,200.00	90.14	271.301	7,292.52	-577.34	-12,292.42	12,305.80	0.00	0.00	0.00
19,300.00	90.14	271.301	7,292.27	-575.07	-12,392.39	12,405.59	0.00	0.00	0.00
19,400.00	90.14	271.301	7,292.02	-572.80	-12,492.37	12,505.38	0.00	0.00	0.00
19,500.00	90.14	271.301	7,291.77	-570.53	-12,592.34	12,605.18	0.00	0.00	0.00
19,600.00	90.14	271.301	7,291.52	-568.26	-12,692.31	12,704.97	0.00	0.00	0.00
19,700.00	90.14	271.301	7,291.27	-565.99	-12,792.29	12,804.76	0.00	0.00	0.00
19,800.00	90.14	271.301	7,291.02	-563.72	-12,892.26	12,904.55	0.00	0.00	0.00
19,900.00	90.14	271.301	7,290.77	-561.45	-12,992.24	13,004.35	0.00	0.00	0.00
20,000.00	90.14	271.301	7,290.52	-559.18	-13,092.21	13,104.14	0.00	0.00	0.00
20,100.00	90.14	271.301	7,290.27	-556.91	-13,192.18	13,203.93	0.00	0.00	0.00
20,200.00	90.14	271.301	7,290.02	-554.64	-13,292.16	13,303.72	0.00	0.00	0.00
20,207.85	90.14	271.301	7,290.00	-554.46	-13,300.00	13,311.55	0.00	0.00	0.00



Lonestar Consulting, LLC Planning Report



Database:	edm	Local Co-ordinate Reference:	Well San Juan 32 7 603 Federal Com 613H - Slot A07
Company:	Hilcorp Energy Corp.	TVD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6748' & RKB 17' @ 6765.00ft
Site:	Burnt Mesa Pad	North Reference:	True
Well:	San Juan 32 7 603 Federal Com 613H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SJFC 613H BHL Rev1 - plan hits target center - Point	0.00	0.000	7,290.00	-554.46	-13,300.00	2,163,613.23	571,237.63	36.9457572	-107.5895549
SJFC 613H LP Rev1 - plan hits target center - Point	0.00	0.000	7,321.00	-836.41	-882.82	2,163,368.96	583,655.58	36.9449915	-107.5470630

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,540.46	2,525.00	OJO ALAMO		0.00	0.000	
2,667.52	2,651.00	KIRTLAND		0.00	0.000	
3,303.86	3,282.00	FRUITLAND		0.00	0.000	
3,686.07	3,661.00	PICTURED CLIFFS		0.00	0.000	
4,005.75	3,978.00	LEWIS SHALE		0.00	0.000	
5,609.20	5,568.00	CLIFFHOUSE		0.00	0.000	
5,826.02	5,783.00	MENEFEE		0.00	0.000	
6,033.76	5,989.00	POINT LOOKOUT		0.00	0.000	
6,515.80	6,467.00	MANCOS		0.00	0.000	
7,071.31	6,996.00	MANCOS A		0.00	0.000	
7,333.35	7,184.00	MANCOS B		0.00	0.000	

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Technical Drilling Plan (Rev. 4)

Hilcorp Energy Company proposes to drill and complete the referenced horizontal well targeting the Mancos formation.

Note: This technical drilling plan will be adjusted based upon actual conditions.

1. Location

Date:	March 22, 2024	Pool:	Mancos
Well Name:	San Juan 32-7 603 Federal Com 613H	Ground Elevation (ft. MSL):	6,748'
Surface Hole Location:	36.9472890° N, -107.5440420° W	Total Measured Depth (ft.)	20,208'
Bottom Hole Location:	36.9457573° N, -107.5895549° W	County, State:	San Juan County, NM

Note: All depths in the directional drilling plan are referenced from an estimated RKB datum of 17' above ground level.

2. Geological Markers

Anticipated formation tops with comments of any possible water, gas or oil shows are indicated below:

Formation	Depth (ft. TVD)	Remarks
Ojo Alamo	2,525	Possible Water
Kirtland	2,651	Gas & Water
Fruitland	3,282	Gas & Water
Pictured Cliffs	3,661	Possible Gas
Lewis Shale	3,978	None
Cliffhouse	5,568	Possible Gas & Water
Menefee	5,783	None
Point Lookout	5,989	Gas
Mancos	6,467	Gas
Mancos A	6,996	Gas
Mancos B	7,184	Gas
Mancos C	7,375	Gas
Mancos D	7,465	Gas
Gallup	7,627	Water & Gas

3. Pressure Control Equipment

See Appendix A for BOP equipment and choke manifold diagram.

- BOP equipment will be nipped up on top of the wellhead after surface casing is set and cemented.
- Pressure control configurations will be designed to meet the minimum 5M standards.
- All equipment will have 5M pressure rating at a minimum.
- A rotating head will be installed on top of the annular as seen in the attached diagram.
- BOP Testing: The BOPE will be tested to **250 psi (Low) for 5 minutes and 5,000 psi (High) for 10 minutes**. Pressure test **surface casing to 600 psi for 30 minutes** and **intermediate casing to 1,500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. BOP

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equipment will be tested upon installation, every 30 days, and after any repairs are made to the BOP equipment. Annular preventors will be functionally tested at least once per week. Pipe and blind rams will be function tested each trip. **The New Mexico Oil & Gas Conservation Division and the BLM will be notified 24 hours in advance of testing BOPE.** All tests and inspections will be recorded and logged with time and results. A full BOP test will be conducted when initially installed for the first well on the pad or if a seal subject to test pressure is broken, following related repairs, and at a minimum of 30-day intervals. A BOPE shell test only will be conducted for subsequent wells on the pad when seals subject to pressure have not been broken, repaired, and fall within the 30-day interval of the first full test.

4. Casing & Cement Program

A. Proposed Casing Program:

Proposed Casing Design								
Casing String	Hole Size	Casing Size	Weight/Grade	Top Depth (MD/TVD)	Shoe Depth (MD/TVD)	Collapse	Yield	Joint Strength
Surface	17-1/2"	13-3/8"	54.5#, J55 or equiv, LTC/BTC	0'	350' / 350'	1,130 psi	2,730 psi	514,000 lbs
Intermediate	12-1/4"	9-5/8"	43.5# L80 or equiv, LTC/BTC	0'	6,617' / 6,567'	3,810 psi	6,330 psi	737,000 lbs
Production	8-1/2"	5-1/2"	20.0#, P110 or equiv, LTC/BTC	0'	20,208' / 7,290'	11,080 psi	12,360 psi	548,000 lbs
Proposed Casing Design Safety Factors								
Casing String	Burst Design SF		Collapse Design SF		Joint Tensile Design SF		Connection Tensile Design SF	
Surface	16.7		8.8		44.7		47.7	
Intermediate	1.61		1.17		3.5		2.8	
Production	2.8		2.9		1.6		1.7	

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Notes:

- Production casing will be run from surface to TD.
- If the 8-1/2" hole is not drilled to the total planned measured depth, the production casing setting depth and length will be adjusted accordingly.
- Casing Design Parameters – Designed for full evacuation. Mud Weights used for calculations: Surface = 9.0 ppg, Intermediate = 11.5 ppg, Production = 12.0 ppg. Burst: 1.15; Collapse: 1.125; Tensile: 1.6.
 - Burst: (Casing Burst Rating) / (Maximum Burst Load (Max MW x TVD x .052))
 - Collapse: (Full hydrostatic of MW in annulus) – (Hydrostatic of vacated casing, 0.1 psi/ft)
 - Tensile: (Tensile rating) / (measured depth x casing weight)
- A toe initiation sliding sleeve will be installed at the toe of the production casing.

B. Proposed Centralizer Program:

Proposed Centralizer Program	
Interval	Centralizers & Placement
Surface	1 centralizer per joint on bottom 3 joints.
Intermediate	1 centralizer per joint in shoe track. 1 centralizer every 3 rd joint to surface.
Production	Centralizers determined by hole conditions from TD to top of cement.

C. Proposed Cement Program:

Proposed Cement Design							
Interval	Depth (ft. MD)	Lead/Tail	Volume (ft ³)	Sacks	Slurry	Density	Planned TOC
Surface	350'	Tail	486 ft ³	414	Premium Cement – 100% Excess 2% CaCl, 0.125 lb/sk Poly E Flake 1.175 ft ³ /sk – 5.14 gal/sk	15.8 ppg	Surface
Intermediate	6,617'	Lead	1,947 ft ³	987	HalCem Cement – 25% Excess 0.3% HR-5, 0.125 lb/sk Poly E Flake 1.974 ft ³ /sk – 10.28 gal/sk	12.3 ppg	Surface
		Tail	633 ft ³	489	VariCem Cement – 25 % Excess 0.1% HR-5, 0.125 lb/sk Poly E Flake 1.295 ft ³ /sk – 5.69 gal/sk	13.5 ppg	5,000'
Production	20,208'	Tail	3,846 ft ³	2,836	BondCem Cement – 10% Excess 0.3% Super CBL, 0.1% HR-601 1.356 ft ³ /sk – 6.08 gal/sk	13.3 ppg	5,000'

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**Notes:**

- The cement slurry additives may be adjusted to accommodate required pump and compressive test times.
- Actual cement volumes will be determined and may be adjusted onsite based on well conditions.
- For the intermediate hole section, a 2-stage or 3-stage cement job may be performed if hole conditions dictate. If needed, the stage tool will be placed appropriately as conditions indicate.
- Cement will be circulated to surface on surface and intermediate casing sections to protect water bearing zones.
- A minimum of 8 hours of wait on cement time will be observed on each hole section to allow adequate time for cement to achieve a minimum of 500 psi of compressive strength. The BOP will not be nipped down, the wellhead will not be installed, the casing will not be tested and the prior casing shoe will not be drilled out until adequate wait on cement time has been observed (8 hours or time to reach 500 psi compressive strength).

5. Drilling Fluids Program**A. Proposed Drilling Fluids Program:**

Proposed Drilling Fluids Program					
Interval	Fluid Type	Density	Fluid Loss	Invert Ratio	Depth
		(ppg)	(mL/30 min)	(%Diesel / %Brine)	(ft. MD)
Surface	Water/Gel	8.3 – 9.2	NC	N/A	0' – 350'
Intermediate	LSND / Gel	8.4 – 10.0	<6	N/A	350' – 6,617'
Production	Oil Base Mud	10.0 – 12.0	6 – 8	70/30 – 75/25	6,617' – 20,208'

Notes:

- In the 8-1/2" production section, oil base mud will be utilized which will be an invert mud. The base fluid will be diesel. Brine fluid will be CaCl₂ or KCl.
- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 1,965 bbls (11,024 ft³).

6. Estimated Pressures & Drilling Hazards**A. Estimated Pressures**

- Estimated Reservoir Pressure of Mancos Shale target: 4,000 – 4,200 psi
- No over-pressured intervals expected (aside from Mancos Shale target).



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- There is production from the Fruitland Coal, Mesa Verde and Pictured Cliffs formations in offset wells in the area, which could result in these formations being depleted.

B. Water Flows

- Water flows are possible in the intermediate section. Water flows will be mitigated with increased mud weight.

C. Lost Circulation

- Lost circulation is possible in the intermediate section. Losses will be mitigated by utilizing LCM in the mud system.

D. Hydrogen Sulfide

- No hydrogen sulfide is expected to be encountered based on nearby well production.

7. Pilot Hole

No pilot hole for this wellbore.

8. Testing, Logging, Coring

A. Mud Logging

- Mud loggers will collect formation samples every 30' from surface casing shoe to TD of the well.

B. MWD

- Measurement while drilling tools will be utilized on all sections of the well to measure and record inclination and azimuth.

C. LWD

- Logging while drilling tools (gamma ray) will be utilized while drilling the production section from the intermediate casing shoe to the production hole section TD to assist in staying in the desired interval while drilling the horizontal section.

D. Open Hole Logging

- None

E. Coring

- None

F. Cased Hole Logging

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- The 9-5/8" intermediate casing will be cemented to surface to protect water bearing zones. If cement is not circulated to surface on the intermediate cement job, a temperature survey or a cement bod log will be run to verify top of cement.

9. Directional Drilling Plan

- The directional drilling plan and plot are attached.
- The directional plan is built from geologic targets from offset wells and lease boundaries. The production hole section will be landed and drilled horizontally within the target formation utilizing LWD tools to steer the wellbore. On-site adjustments to the directional plan will be made as formation and wellbore dictate.

10. Completion

A. Pressure Testing

- A pressure test of the 5-1/2" production casing will be conducted to the maximum allowable frac pressure for 30 minutes.
- Pressure will be cycled to shift the toe sleeve open.

B. Stimulation

- The well will be stimulated with sand and water. The number of stages and amount of proppant used will be adjusted based on actual lateral length and real-time pumping conditions during the stimulation.
- Individual stages will be perforated on wireline and isolated using frac plugs or dissolvable frac plugs.
- Upon completion of the stimulation operation, frac plugs will be drilled out and the stimulation fluid will be flowed back.

*NOTE: Although this horizontal well may be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 8(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 8(2) NMAC, 19.15.16.15 8(2)NMAC, and 19.15.16.15 8(4) NMAC.

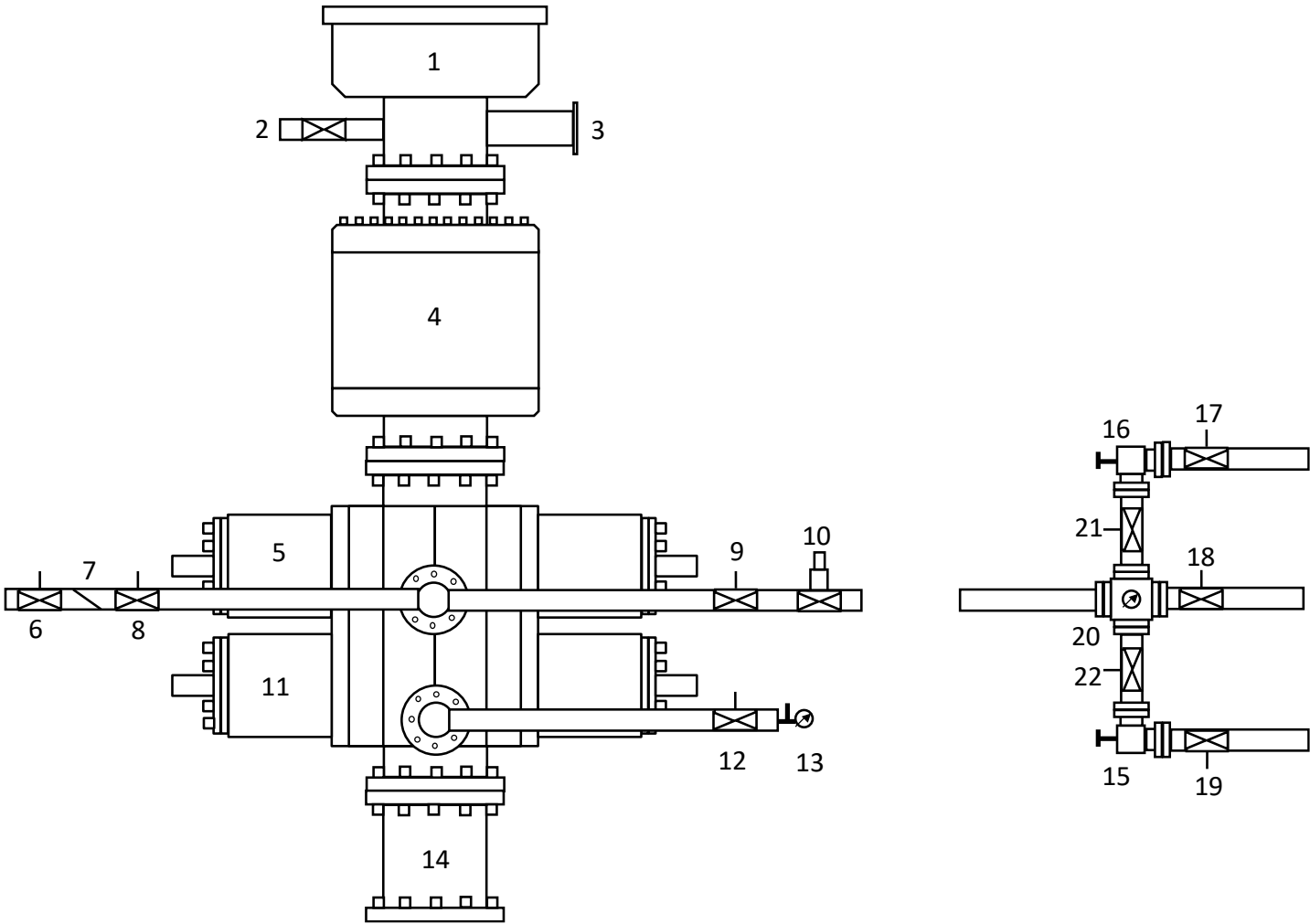
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Appendix A

13-5/8” 5M BOP & 5M Choke Manifold Configuration



1	Rotating Head	12	Manual Isolation Valve
2	Fill-Up Line	13	Needle Valve & Pressure Gauge
3	Flow Line	14	Spacer Spool (if needed)
4	5M Annular Preventer	15	Manual Choke
5	5M Pipe Rams	16	Hydraulicly Operated Choke
6	Manual Isolation Valve	17	Manual Isolation Valve
7	Check Valve	18	Manual Isolation Valve
8	Manual Isolation Valve	19	Manual Isolation Valve
9	Manual Isolation Valve	20	Valve Block & Pressure Gauge
10	High Closing Ratio Valve	21	Manual Isolation Valve
11	5M Blind Rams	22	Manual Isolation Valve

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

CONDITIONS

Action 337711

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 337711
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	4/26/2024