



Company: ConocoPhillips
Lease/Well: UL 20 Gold Spoon/2901H
API: 42-301-36071
Rig Name: Open Hole
State/County: Texas/Loving
VS-Azi: 0.00 Degrees
Latitude: 31.67238, Longitude: -103.33835
Grid North = True North +1.55 degs (NAD 27)
Grid Correction Applied = +1.55 degs



Depth Reference = : Ground Level

DRILLOG HA GYRO SURVEY CALCULATIONS

Error Model: VESSI_GYROFLEX.IPM

Filename: UL 20 Gold Spoon 2901H.ut

Minimum Curvature Method

Report Date/Time: 11/7/2022 / 09:15

Vaughn Energy Services

Cisco Texas

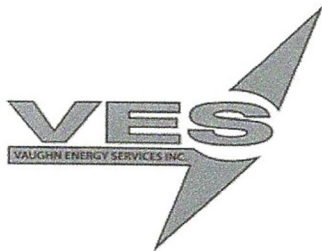
254-488-2642

Gregg Wilson

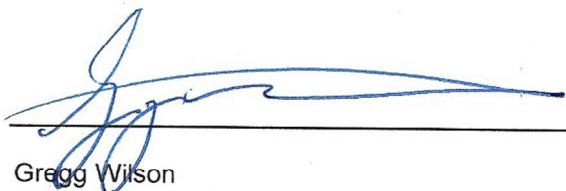
UL 20 Gold Spoon 2901H API # 42-301-36071

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.37	151.60	100.00	-0.28	0.15	-0.28	0.32	151.60	0.37
200.00	0.37	244.11	200.00	-0.70	0.01	-0.70	0.70	179.07	0.53
300.00	0.19	143.53	300.00	-0.98	-0.18	-0.98	0.99	190.58	0.45
400.00	0.42	283.79	400.00	-1.02	-0.44	-1.02	1.11	203.35	0.58
500.00	0.12	231.97	500.00	-1.00	-0.88	-1.00	1.33	221.40	0.36
600.00	0.43	339.13	599.99	-0.71	-1.10	-0.71	1.31	237.07	0.48
700.00	0.29	232.90	699.99	-0.51	-1.44	-0.51	1.52	250.41	0.58
800.00	0.56	339.29	799.99	-0.21	-1.81	-0.21	1.82	263.42	0.69
900.00	0.55	278.80	899.99	0.32	-2.46	0.32	2.48	277.41	0.56
1000.00	0.44	320.31	999.98	0.69	-3.18	0.69	3.25	282.27	0.37
1063.00	0.55	289.58	1062.98	0.98	-3.62	0.98	3.75	285.15	0.45

HORIZONTAL DISPLACEMENT IS
3.75 FEET AT 285.15 DEGREES



I Gregg Wilson certify that I am employed by Vaughn Energy Services Inc.
That I did on the day(s) of 11/5/2022 conduct or supervise the take of a
Rate Gyro survey from a depth of 0.00 feet to a depth of 1,063.00
feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services
Inc., that I am authorized and qualified to make this report; that this survey was conducted at the request of
ConocoPhillips for the UL 20 Gold Spoon Well # 2901H
API# 42-301-36071 in Loving County/ Parish Texas
; and I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn
Energy Services Inc.



Gregg Wilson
Service Technician
Vaughn Energy Services Inc.

OPERATOR: PDEH LLC
WELL LOCATION

(LEASE NAME & WELL NO.)
UL 20 GOLD SPOON 2901H

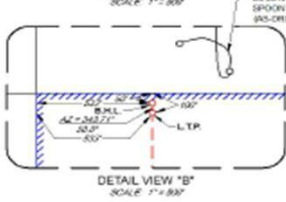
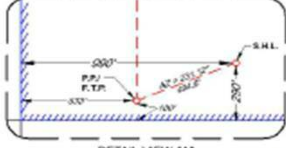
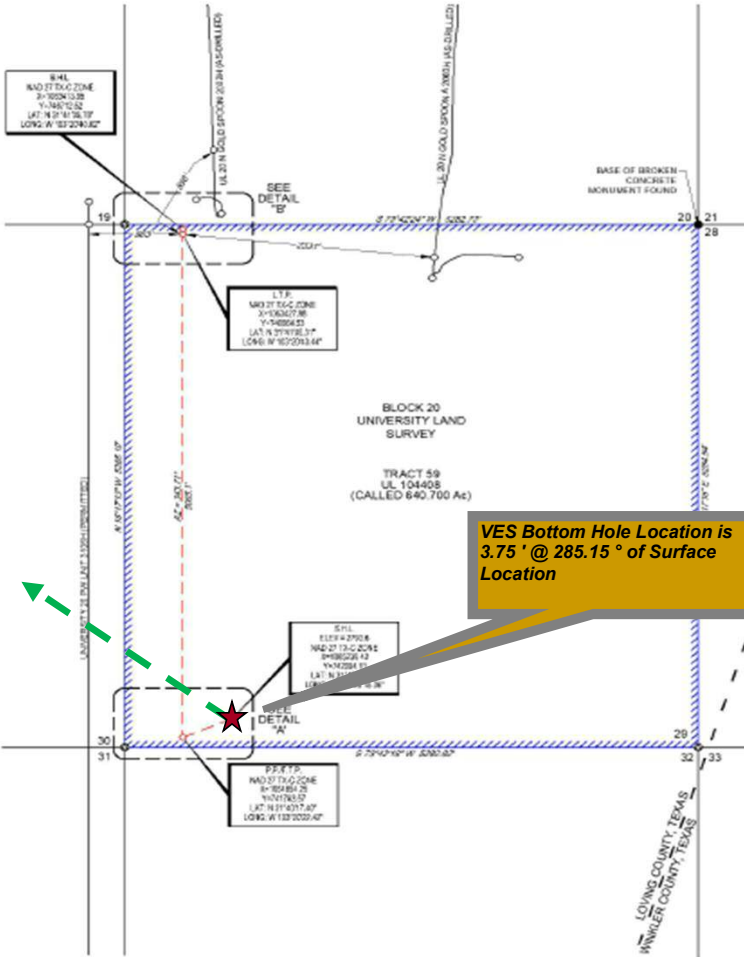
LEASE ADDRESS:
640.700 ACRES (CALLED)

NEAREST TOWN & COUNTY:
BROOKFORD
±15.5 MILES SOUTHEAST OF MENTONE, TEXAS

S.H.L.P.P./F.T.P.: SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY
L.T.P.B.H.L.: SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY
LOVING COUNTY, TEXAS



SCALE: 1" = 1000'
0 500 1000'



PRODUCTIVE LATERAL

LENGTH (F.T.P. TO L.T.P.)
1 5.069
TOTAL 5.069

TIES TABLE

POINT	LEASE	SURVEY SECTION
S.H.L.	2901 F.S.W.	2901 F.S.W. & 2902 F.S.W.
P.P.	533 F.S.W.	533 F.S.W. & 534 F.S.W.
F.T.P.	533 F.S.W.	533 F.S.W. & 534 F.S.W.
L.T.P.	533 F.S.W.	533 F.S.W. & 534 F.S.W.
B.H.L.	533 F.S.W.	533 F.S.W. & 534 F.S.W.

LEGEND:

-----	Lease Boundary
-----	Approximate Location County Line
-----	Section Line
-----	Proposed Well Path
-----	Existing Permitted Well Path
●	Monument Found
○	Calculated Center
○	Well Point



John R. Anderson, R.P.L.S. No. 6442
5/6/2022

UL-20-29-P3 UL 20 GOLD SPOON #2901H	REVISION:		NOTES:	NOTES CONT'D:
	INT	DATE		
DATE: 07/11/2022			1. ORIGINAL DOCUMENT SIZE: 11" x 17"	4. THE PRELIMINARY LOCATIONS HAVE BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF APRIL 19, 2022.
FILE: UL 20-29-P3 2901H 2901H			2. ALL BEARING, DISTANCES AND COORDINATE VALUES CONTAINED HEREON ARE GROUND SURVEYED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, U.S. SURVEY FEET, NORTH.	5. S.H.L. = SURFACE HOLE LOCATION.
DRAWN BY: A.C.L./J.M.			3. THIS LOCATION RECORD IS BEING SUBMITTED TO THE BUREAU OF REVENUE, STATE OF TEXAS, FOR RECORDATION UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE ACCORDING TO THE EVIDENCE. OFFICIAL SURVEY RECORDS, MAPS, AND OTHER DATA PROVIDED BY THE BUREAU OF REVENUE, STATE OF TEXAS, ARE USED IN THE PREPARATION OF THIS LOCATION RECORD.	6. P.P. = POINT OF PENETRATION.
SHEET: 1 OF 1			4. A "BOUNDARY SURVEY" IN COMPLIANCE WITH T.S.P.L.S. STANDARD STANDARDS OF PRACTICE FOR BOUNDARY SURVEYS. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PROVISIONS OF THE TEXAS SURVEYING ACT, CHAPTER 131, THAT APPLY TO BOUNDARY SURVEYS. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.	7. F.T.P. = FIRST TAKE POINT.
			5. ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 83) U.S. SURVEY FEET.	8. L.T.P. = LAST TAKE POINT.
			6. ALL MEASUREMENTS, CALCULATIONS, AND DATA ON THIS LOCATION RECORD ARE BASED ON INFORMATION PROVIDED BY POSSESSOR OF THE LAND, AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF PDEH LLC.	9. B.H.L. = BOTTOM HOLE LOCATION.

VES Bottom Hole Location is 3.75' @ 285.15° of Surface Location			
MD / FT	1063'	1062.98'	TVD / FT
North / FT	South / FT	East / FT	West / FT
0.98'			3.62'



Proposed Azimuth:	342.67
Target Inclination:	0.00

[illegible]



Survey Certification Letter

November 30, 2022

State of Texas
County of Loving

I, Roger Dubose, certify that; I am employed by **Integrity Services, LLC**; that I did on the day(s) of through 10/28/2022 through 10/30/2022 conducted and / or supervised the MWD survey(s) taken from the depth of 120 feet to depth of 1176 feet; that the data is true, correct, complete and within the specifications and limitations of the survey tool provided by **Integrity Services, LLC**; that I am authorized and qualified to make this survey report; that was requested by **Conoco Phillips** for the surveys performed on the **UL 20 Gold Spoon 2901H**, API No. **42-301-36071**. In **Loving** County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures set forth by **Integrity Services, LLC**.

Roger Dubose

Roger Dubose
Directional Manager
P.O. Box 5989 | Midland, TX 79704
Office: 432-661-6075
roger.dubose@integrity-serv.com

OPERATOR: PDEH LLC

WELL LOCATION

LEASE NAME & WELL NO.:

UL 20 GOLD SPOON 2901H

LEASE ACREAGE:

640.700 ACRES (CALLED)

NEAREST TOWN IN COUNTY:

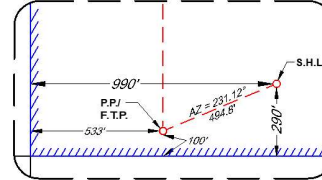
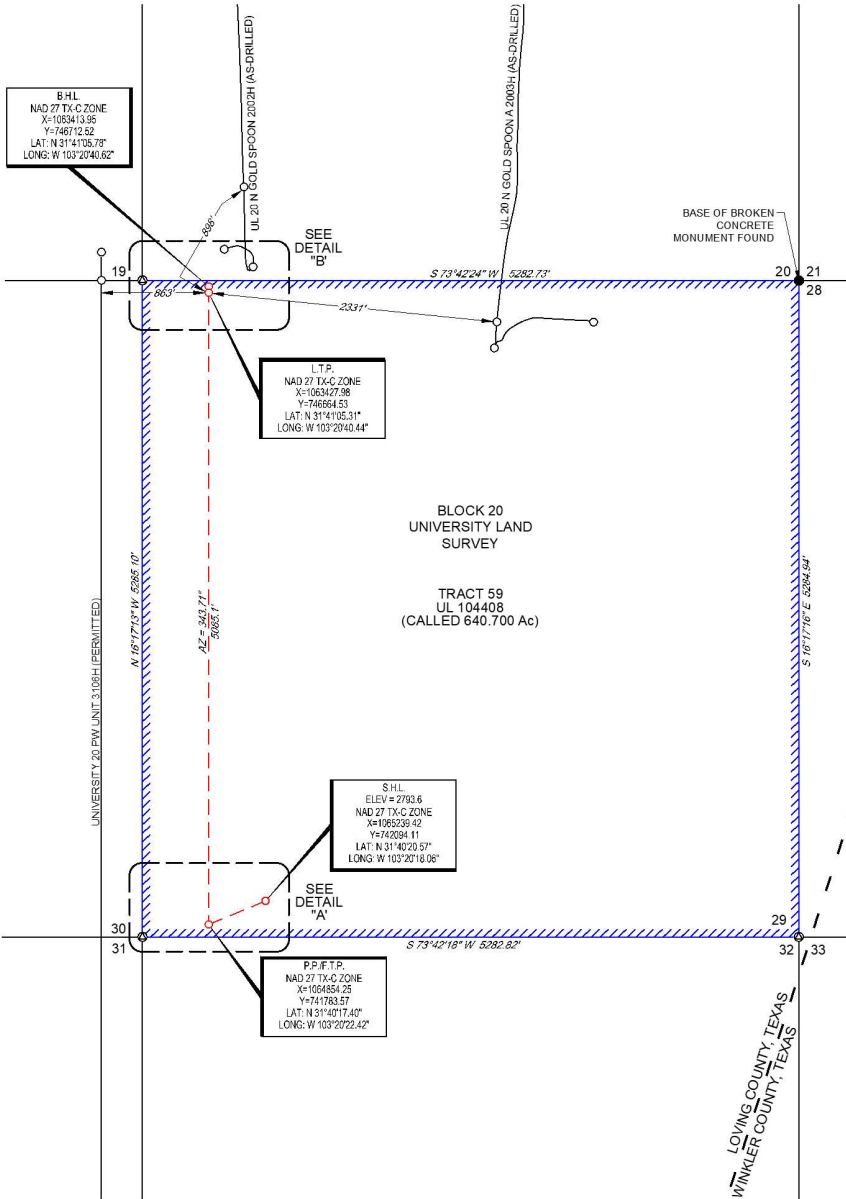
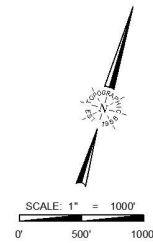
±15.5 MILES SOUTHEAST OF MENTONE, TEXAS

DESCRIPTION:

S.H.L./P.P./F.T.P.: SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY

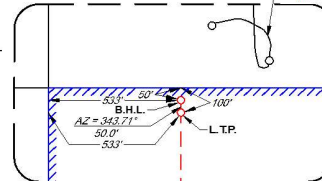
L.T.P./B.H.L.: SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY

LOVING COUNTY, TEXAS



DETAIL VIEW "A"

SCALE: 1" = 300'



DETAIL VIEW "B"

SCALE: 1" = 300'

PRODUCTIVE LATERAL

LENGTH (F.T. TO L.T.P.)	
1	5,085'
TOTAL	5,085'

TIES TABLE

POINT	LEASE	SURVEY/SECTION
S.H.L.	990' FSWL & 290' FSEL	990' FSWL & 290' FSEL
P.P./F.T.P.	533' FSWL & 100' FSEL	533' FSWL & 100' FSEL
L.T.P.	100' FNWL & 533' FSWL	100' FNWL & 533' FSWL
B.H.L.	50' FNWL & 533' FSWL	50' FNWL & 533' FSWL

LEGEND:

	Lease Boundary
	Approximate Location County Line
	Section Line
	Proposed Well Path
	Existing/Permitted Well Path
	Monument Found
	Calculated Corner
	Well Point



John R. Anderson 9/6/2022
John R. Anderson, R.P.L.S. No. 6442



1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

	REVISION:	
	INT	DATE
UL-20-29-P3 UL 20 GOLD SPOON #2901H		
DATE: 07/11/2022		
FILE: LO-UL-20-29-P3-GOLD SPOON #2901H REV		
DRAWN BY: A.C.L./O.M.		
SHEET: 1 OF 1		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 11" X 17"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1983, UNLESS OTHERWISE NOTED.
3. THIS LOCATION AND/OR UNIT/LEASE BOUNDARY HAS BEEN CAREFULLY SURVEYED ON THE GROUND UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE ACCORDING TO THE EVIDENCE, OFFICIAL SURVEY RECORDS, MAPS, AND OTHER DATA PROVIDED BY PERMAN DELAWARE ENTERPRISES HOLDINGS, LLC. THIS PLAT WAS CREATED FOR THE SOLE PURPOSE OF FILING A PERMIT WITH THE RAILROAD COMMISSION OF TEXAS AND SHOULD NOT BE CONSTRUED AS A "BOUNDARY SURVEY" IN COMPLIANCE WITH T.B.P.L.S. MINIMUM STANDARDS OF PROCEDURES FOR BOUNDARY SURVEYS. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
4. ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY, BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), U.S. SURVEY FEET.
5. ALL MINERAL OWNERSHIP DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY PERMAN DELAWARE ENTERPRISES HOLDINGS, LLC OR ITS SUBSIDIARIES & AFFILIATES.

NOTES CONT'D:
6. THE PRELIMINARY LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF JUNE 15, 2022.
7. S.H.L. = SURFACE HOLE LOCATION
8. P.P. = POINT OF PENETRATION
9. F.T.P. = FIRST TAKE POINT
10. L.T.P. = LAST TAKE POINT
11. B.H.L. = BOTTOM HOLE LOCATION

FEBRUARY 9 2023
SURVEY REPORT

CONOCOPHILIPS
WELL: UL 20 GOLD SPOON #2901H
RIG: H&P #625

CUSTOMER	ConocoPhillips	SDI JOB NO.	OP.038333
PROJECT	UL 20 Gold Spoon #2901H	SDI DISTRICT	Midland
FIELD	N/A	SDI KIT/UNIT	

SITE INFORMATION

Site Name	UL 20 Gold Spoon #2901H	Section
Lat/Long	31.67253 N, 103.33871 W	Township
Northing		Range
Easting		

MAP INFORMATION

North Reference	Grid North	
Grid Correction	1.55 deg	
System	US State Plane 1927	
Datum	North American Datum 1927 (Clarke 1866)	
Map Zone	Texas Central: 4203	

WELL INFORMATION

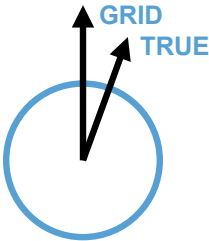
Lat/Long	31.67253 N, 103.33871 W
Northing	
Easting	
UWI	42-301-36071

DEPTH AND ELEVATION REFERENCE

Ground Level	2793.6 ft above Mean Sea Level
Reference Datum	RKB
Reference Height	26 ft above G.L.
Reference Elevation	2819.6 ft

VERTICAL SECTION REFERENCE

+N/-S	0 ft
+E/-W	0 ft
Proposal Direction	0.00°
Calculation Method	Minimum Curvature



LOCAL GRAVITY REFERENCE INFORMATION

Local Gravity	998.513 mG [computed]
True to Grid	add 1.55°

WELL NOTES

Keeper Gyro Survey

OPERATORS

TROY MORGAN

SDI Operator Name (Printed)	SIGNATURE	DATE
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MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.54	140.94	100.00	-0.36	-0.36	0.30	0.54	0.47	140.94
125.00	0.17	270.41	125.00	-0.46	-0.46	0.33	2.64	0.56	143.86
150.00	0.10	244.39	150.00	-0.46	-0.46	0.28	0.38	0.54	149.22
175.00	0.17	288.29	175.00	-0.46	-0.46	0.22	0.48	0.51	154.24
200.00	0.23	295.70	200.00	-0.43	-0.43	0.14	0.25	0.45	161.50
225.00	0.20	295.91	225.00	-0.39	-0.39	0.06	0.09	0.39	171.36
250.00	0.26	303.48	250.00	-0.34	-0.34	-0.03	0.27	0.34	184.97
275.00	0.23	310.62	275.00	-0.27	-0.27	-0.12	0.17	0.30	203.17
300.00	0.19	312.85	300.00	-0.21	-0.21	-0.19	0.19	0.28	221.36
325.00	0.24	306.75	325.00	-0.15	-0.15	-0.26	0.22	0.30	239.49
350.00	0.23	317.28	350.00	-0.08	-0.08	-0.33	0.18	0.34	255.88
375.00	0.27	307.44	375.00	-0.01	-0.01	-0.41	0.22	0.41	268.37
400.00	0.25	306.04	400.00	0.06	0.06	-0.50	0.07	0.50	276.30
425.00	0.27	311.57	425.00	0.13	0.13	-0.59	0.13	0.60	282.08
450.00	0.28	319.18	450.00	0.21	0.21	-0.67	0.16	0.71	287.45
475.00	0.17	330.06	475.00	0.29	0.29	-0.73	0.50	0.79	291.62
500.00	0.23	318.81	500.00	0.36	0.36	-0.78	0.29	0.86	294.64
525.00	0.18	313.25	525.00	0.42	0.42	-0.85	0.21	0.95	296.65
550.00	0.25	320.37	550.00	0.49	0.49	-0.91	0.31	1.03	298.51
575.00	0.34	325.19	574.99	0.60	0.60	-0.99	0.35	1.15	301.18
600.00	0.39	319.19	599.99	0.72	0.72	-1.08	0.26	1.30	303.65
625.00	0.46	319.76	624.99	0.86	0.86	-1.20	0.28	1.48	305.61
650.00	0.35	319.60	649.99	1.00	1.00	-1.32	0.45	1.65	307.10
675.00	0.35	322.66	674.99	1.12	1.12	-1.41	0.07	1.80	308.27
700.00	0.42	321.72	699.99	1.25	1.25	-1.52	0.28	1.96	309.43
725.00	0.47	315.73	724.99	1.39	1.39	-1.64	0.30	2.15	310.25
750.00	0.48	321.65	749.99	1.55	1.55	-1.78	0.20	2.36	310.99
775.00	0.58	312.62	774.99	1.72	1.72	-1.94	0.51	2.59	311.50
800.00	0.44	313.41	799.99	1.87	1.87	-2.10	0.55	2.81	311.62
825.00	0.60	312.49	824.99	2.02	2.02	-2.27	0.63	3.04	311.71
850.00	0.46	313.08	849.99	2.18	2.18	-2.44	0.54	3.27	311.79

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
875.00	0.52	311.24	874.99	2.32	2.32	-2.60	0.26	3.49	311.81
900.00	0.61	308.47	899.98	2.48	2.48	-2.79	0.37	3.74	311.67
925.00	0.64	309.05	924.98	2.65	2.65	-3.00	0.12	4.01	311.47
950.00	0.53	309.81	949.98	2.82	2.82	-3.20	0.44	4.26	311.35
975.00	0.55	310.79	974.98	2.97	2.97	-3.38	0.07	4.50	311.29
1000.00	0.57	311.46	999.98	3.13	3.13	-3.56	0.11	4.74	311.28
1025.00	0.51	302.99	1024.98	3.27	3.27	-3.75	0.41	4.98	311.10
1050.00	0.68	299.94	1049.98	3.41	3.41	-3.97	0.70	5.24	310.62
1075.00	0.72	296.63	1074.97	3.55	3.55	-4.24	0.23	5.54	309.94
1100.00	0.69	296.40	1099.97	3.69	3.69	-4.52	0.12	5.84	309.23
1125.00	0.81	298.90	1124.97	3.84	3.84	-4.81	0.49	6.16	308.62
1150.00	0.77	297.78	1149.97	4.01	4.01	-5.12	0.17	6.50	308.08
1175.00	0.78	299.18	1174.97	4.17	4.17	-5.41	0.08	6.83	307.61
1200.00	0.78	297.79	1199.96	4.33	4.33	-5.71	0.08	7.17	307.18
1225.00	0.75	292.30	1224.96	4.47	4.47	-6.01	0.31	7.49	306.64
1250.00	0.73	295.65	1249.96	4.60	4.60	-6.31	0.19	7.81	306.12
1275.00	0.75	300.38	1274.96	4.76	4.76	-6.59	0.26	8.13	305.80
1300.00	0.76	293.25	1299.95	4.90	4.90	-6.89	0.38	8.45	305.46
1325.00	0.76	297.70	1324.95	5.05	5.05	-7.19	0.24	8.78	305.08
1350.00	0.84	301.62	1349.95	5.22	5.22	-7.49	0.38	9.13	304.88
1375.00	0.78	300.06	1374.95	5.40	5.40	-7.79	0.26	9.48	304.73
1400.00	0.84	304.26	1399.95	5.59	5.59	-8.09	0.33	9.83	304.64
1425.00	0.85	303.88	1424.94	5.80	5.80	-8.40	0.06	10.20	304.62
1450.00	0.86	306.32	1449.94	6.01	6.01	-8.70	0.15	10.58	304.63
1475.00	0.93	303.94	1474.94	6.23	6.23	-9.02	0.34	10.97	304.65
1500.00	0.93	306.72	1499.93	6.47	6.47	-9.35	0.18	11.37	304.67
1525.00	0.96	313.01	1524.93	6.73	6.73	-9.67	0.43	11.78	304.86
1550.00	1.03	319.83	1549.93	7.05	7.05	-9.97	0.55	12.21	305.27
1575.00	1.01	325.14	1574.92	7.40	7.40	-10.24	0.38	12.63	305.87
1600.00	0.88	329.02	1599.92	7.75	7.75	-10.46	0.59	13.02	306.52
1625.00	0.87	332.21	1624.92	8.08	8.08	-10.65	0.20	13.37	307.19
1650.00	0.89	333.23	1649.91	8.42	8.42	-10.83	0.10	13.72	307.88

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
1675.00	0.87	336.90	1674.91	8.77	8.77	-10.99	0.25	14.06	308.60
1700.00	0.81	340.45	1699.91	9.11	9.11	-11.12	0.31	14.38	309.32
1725.00	0.87	339.25	1724.90	9.45	9.45	-11.25	0.27	14.69	310.05
1750.00	0.82	338.29	1749.90	9.80	9.80	-11.38	0.23	15.02	310.73
1775.00	0.44	327.64	1774.90	10.05	10.05	-11.50	1.57	15.27	311.14
1800.00	1.46	179.46	1799.90	9.81	9.81	-11.55	7.38	15.15	310.35
1825.00	3.06	173.97	1824.88	8.83	8.83	-11.47	6.46	14.48	307.58
1850.00	3.52	172.43	1849.84	7.40	7.40	-11.30	1.89	13.51	303.23
1875.00	3.54	173.59	1874.79	5.88	5.88	-11.12	0.30	12.57	297.86
1900.00	3.68	171.22	1899.74	4.31	4.31	-10.91	0.82	11.73	291.58
1925.00	3.59	171.99	1924.69	2.74	2.74	-10.67	0.41	11.02	284.42
1950.00	3.54	173.11	1949.64	1.20	1.20	-10.47	0.35	10.54	276.54
1975.00	3.92	174.41	1974.59	-0.41	-0.41	-10.30	1.54	10.30	267.69
2000.00	5.07	175.10	1999.51	-2.36	-2.36	-10.12	4.62	10.39	256.85
2025.00	5.64	174.78	2024.40	-4.69	-4.69	-9.91	2.29	10.97	244.68
2050.00	5.58	175.50	2049.28	-7.12	-7.12	-9.71	0.39	12.04	233.72
2075.00	5.58	174.68	2074.16	-9.55	-9.55	-9.50	0.32	13.47	224.86
2100.00	5.52	173.48	2099.05	-11.95	-11.95	-9.25	0.52	15.11	217.73
2125.00	5.26	172.01	2123.94	-14.28	-14.28	-8.95	1.20	16.86	212.08
2150.00	5.06	172.23	2148.83	-16.51	-16.51	-8.64	0.77	18.63	207.64
2175.00	5.11	170.89	2173.74	-18.70	-18.70	-8.32	0.51	20.47	203.98
2200.00	5.04	170.99	2198.64	-20.88	-20.88	-7.97	0.25	22.35	200.89
2225.00	5.02	170.09	2223.54	-23.05	-23.05	-7.61	0.33	24.27	198.27
2250.00	4.74	167.02	2248.45	-25.13	-25.13	-7.19	1.54	26.14	195.97
2275.00	4.53	163.70	2273.37	-27.08	-27.08	-6.68	1.36	27.90	193.86
2300.00	4.47	161.97	2298.29	-28.96	-28.96	-6.10	0.58	29.59	191.90
2325.00	4.11	160.55	2323.22	-30.73	-30.73	-5.50	1.52	31.22	190.15
2350.00	3.89	156.46	2348.16	-32.35	-32.35	-4.87	1.44	32.72	188.55
2375.00	3.95	155.56	2373.10	-33.91	-33.91	-4.17	0.35	34.17	187.01
2400.00	3.90	157.16	2398.04	-35.48	-35.48	-3.48	0.49	35.65	185.61
2425.00	3.84	157.02	2422.99	-37.04	-37.04	-2.83	0.25	37.15	184.36

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
2450.00	3.75	157.73	2447.93	-38.56	-38.56	-2.19	0.40	38.63	183.25
2475.00	4.37	157.25	2472.87	-40.20	-40.20	-1.51	2.47	40.23	182.15
2500.00	5.84	171.56	2497.77	-42.33	-42.33	-0.96	7.74	42.35	181.30
2525.00	6.65	177.22	2522.62	-45.04	-45.04	-0.70	4.07	45.04	180.89
2550.00	6.96	177.68	2547.45	-48.00	-48.00	-0.57	1.28	48.00	180.68
2575.00	6.98	178.07	2572.26	-51.03	-51.03	-0.46	0.19	51.03	180.51
2600.00	7.06	177.56	2597.07	-54.08	-54.08	-0.34	0.39	54.08	180.36
2625.00	6.84	174.60	2621.89	-57.10	-57.10	-0.13	1.67	57.10	180.13
2650.00	6.64	171.97	2646.72	-60.01	-60.01	0.21	1.48	60.01	179.80
2675.00	6.40	168.34	2671.56	-62.81	-62.81	0.69	1.90	62.81	179.37
2700.00	6.38	167.00	2696.40	-65.52	-65.52	1.29	0.60	65.54	178.88
2725.00	6.38	165.22	2721.25	-68.22	-68.22	1.95	0.79	68.25	178.36
2750.00	6.33	165.23	2746.09	-70.90	-70.90	2.66	0.20	70.95	177.85
2775.00	6.04	166.54	2770.95	-73.51	-73.51	3.32	1.32	73.59	177.42
2800.00	5.86	166.51	2795.81	-76.03	-76.03	3.92	0.68	76.13	177.05
2825.00	5.83	166.84	2820.68	-78.51	-78.51	4.51	0.19	78.64	176.71
2850.00	5.72	169.12	2845.55	-80.97	-80.97	5.03	1.01	81.13	176.44
2875.00	5.98	179.18	2870.42	-83.50	-83.50	5.29	4.22	83.66	176.38
2900.00	6.36	189.34	2895.28	-86.16	-86.16	5.08	4.61	86.31	176.63
2925.00	6.73	192.81	2920.12	-88.96	-88.96	4.53	2.19	89.07	177.08
2950.00	6.85	193.62	2944.94	-91.84	-91.84	3.85	0.58	91.92	177.60
2975.00	6.82	193.71	2969.76	-94.73	-94.73	3.15	0.10	94.78	178.09
3000.00	6.84	193.05	2994.59	-97.62	-97.62	2.46	0.32	97.65	178.55
3025.00	6.59	192.58	3019.42	-100.47	-100.47	1.81	1.00	100.49	178.97
3050.00	6.48	192.79	3044.25	-103.25	-103.25	1.19	0.47	103.25	179.34
3075.00	6.08	194.42	3069.10	-105.91	-105.91	0.55	1.76	105.91	179.70
3100.00	5.74	195.84	3093.97	-108.39	-108.39	-0.12	1.47	108.39	180.07
3125.00	5.71	196.05	3118.85	-110.79	-110.79	-0.81	0.14	110.79	180.42
3150.00	5.77	195.47	3143.72	-113.20	-113.20	-1.49	0.33	113.21	180.75
3175.00	5.76	196.11	3168.59	-115.62	-115.62	-2.17	0.26	115.64	181.08
3200.00	5.77	195.65	3193.47	-118.03	-118.03	-2.86	0.19	118.06	181.39
3225.00	5.61	195.92	3218.34	-120.42	-120.42	-3.53	0.62	120.47	181.68

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
3250.00	5.42	197.56	3243.23	-122.72	-122.72	-4.22	0.99	122.79	181.97
3275.00	5.35	196.88	3268.12	-124.96	-124.96	-4.92	0.39	125.05	182.25
3300.00	5.21	197.86	3293.01	-127.15	-127.15	-5.60	0.67	127.27	182.52
3325.00	5.08	200.60	3317.91	-129.27	-129.27	-6.34	1.10	129.42	182.81
3350.00	5.04	205.68	3342.81	-131.29	-131.29	-7.21	1.80	131.49	183.14
3375.00	5.11	206.65	3367.72	-133.28	-133.28	-8.18	0.44	133.53	183.51
3400.00	5.06	206.78	3392.62	-135.26	-135.26	-9.18	0.21	135.57	183.88
3425.00	4.84	206.95	3417.52	-137.18	-137.18	-10.16	0.89	137.56	184.23
3450.00	4.49	206.76	3442.44	-139.00	-139.00	-11.07	1.39	139.44	184.56
3475.00	4.30	203.37	3467.37	-140.73	-140.73	-11.89	1.29	141.23	184.83
3500.00	3.95	200.47	3492.30	-142.40	-142.40	-12.56	1.61	142.95	185.04
3525.00	3.56	199.26	3517.25	-143.94	-143.94	-13.12	1.61	144.53	185.21
3550.00	3.24	193.19	3542.21	-145.36	-145.36	-13.53	1.92	145.99	185.32
3575.00	3.01	184.03	3567.17	-146.70	-146.70	-13.74	2.20	147.34	185.35
3600.00	2.80	181.23	3592.14	-147.97	-147.97	-13.80	1.01	148.61	185.33
3625.00	2.57	180.71	3617.11	-149.14	-149.14	-13.82	0.92	149.78	185.29
3650.00	2.23	186.31	3642.09	-150.18	-150.18	-13.88	1.66	150.82	185.28
3675.00	1.95	193.40	3667.07	-151.08	-151.08	-14.03	1.52	151.73	185.31
3700.00	1.93	195.33	3692.06	-151.90	-151.90	-14.24	0.28	152.56	185.36
3725.00	1.73	201.42	3717.04	-152.66	-152.66	-14.49	1.10	153.34	185.42
3750.00	1.59	217.50	3742.03	-153.28	-153.28	-14.84	1.94	154.00	185.53
3775.00	1.51	215.52	3767.02	-153.82	-153.82	-15.24	0.39	154.58	185.66
3800.00	1.47	226.61	3792.02	-154.31	-154.31	-15.67	1.16	155.10	185.80
3825.00	1.38	237.70	3817.01	-154.69	-154.69	-16.15	1.15	155.53	185.96
3850.00	1.37	248.15	3842.00	-154.96	-154.96	-16.68	1.00	155.86	186.14
3875.00	1.33	253.96	3866.99	-155.16	-155.16	-17.24	0.57	156.11	186.34
3900.00	1.30	258.30	3891.99	-155.29	-155.29	-17.80	0.41	156.31	186.54
3925.00	0.74	243.82	3916.98	-155.42	-155.42	-18.22	2.46	156.49	186.69
3950.00	0.32	136.04	3941.98	-155.54	-155.54	-18.32	3.57	156.62	186.72
3975.00	1.53	102.63	3966.98	-155.67	-155.67	-17.94	5.11	156.70	186.57
4000.00	2.42	98.46	3991.96	-155.82	-155.82	-17.09	3.60	156.75	186.26
4025.00	3.32	97.48	4016.93	-155.99	-155.99	-15.85	3.59	156.79	185.80

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
4050.00	3.92	96.43	4041.88	-156.18	-156.18	-14.29	2.42	156.83	185.23
4075.00	4.16	94.93	4066.82	-156.35	-156.35	-12.53	1.07	156.85	184.58
4100.00	4.70	95.29	4091.74	-156.53	-156.53	-10.61	2.14	156.88	183.88
4125.00	5.01	96.52	4116.66	-156.74	-156.74	-8.51	1.30	156.97	183.11
4150.00	4.99	96.21	4141.56	-156.98	-156.98	-6.34	0.13	157.11	182.31
4175.00	5.02	95.84	4166.47	-157.21	-157.21	-4.17	0.17	157.27	181.52
4200.00	4.83	97.53	4191.37	-157.46	-157.46	-2.04	0.96	157.48	180.74
4225.00	4.66	100.41	4216.29	-157.78	-157.78	0.00	1.16	157.78	180.00
4250.00	4.67	114.68	4241.21	-158.39	-158.39	1.92	4.63	158.40	179.30
4275.00	4.36	133.92	4266.13	-159.48	-159.48	3.53	6.15	159.52	178.73
4300.00	4.44	154.27	4291.06	-161.01	-161.01	4.64	6.22	161.08	178.35
4325.00	4.22	161.46	4315.99	-162.75	-162.75	5.35	2.34	162.84	178.12
4350.00	4.08	165.45	4340.92	-164.49	-164.49	5.87	1.28	164.59	177.96
4375.00	4.18	164.86	4365.86	-166.23	-166.23	6.33	0.41	166.35	177.82
4400.00	4.25	164.94	4390.79	-168.00	-168.00	6.81	0.30	168.14	177.68
4425.00	4.14	165.28	4415.72	-169.77	-169.77	7.28	0.44	169.92	177.55
4450.00	4.13	164.45	4440.66	-171.51	-171.51	7.75	0.24	171.68	177.41
4475.00	3.80	167.01	4465.60	-173.19	-173.19	8.18	1.50	173.38	177.30
4500.00	3.71	169.30	4490.54	-174.79	-174.79	8.51	0.70	175.00	177.21
4525.00	3.59	171.61	4515.49	-176.36	-176.36	8.78	0.77	176.58	177.15
4550.00	3.86	201.46	4540.44	-177.92	-177.92	8.58	7.75	178.12	177.24
4575.00	4.55	219.22	4565.37	-179.47	-179.47	7.65	5.86	179.63	177.56
4600.00	4.82	222.62	4590.29	-181.01	-181.01	6.31	1.55	181.12	178.00
4625.00	4.72	220.42	4615.20	-182.57	-182.57	4.93	0.84	182.63	178.45
4650.00	4.39	215.49	4640.12	-184.13	-184.13	3.71	2.05	184.17	178.85
4675.00	3.97	209.85	4665.06	-185.66	-185.66	2.72	2.35	185.68	179.16
4700.00	3.59	201.61	4690.00	-187.13	-187.13	2.00	2.64	187.14	179.39
4725.00	3.42	200.53	4714.96	-188.56	-188.56	1.45	0.73	188.57	179.56
4750.00	3.34	200.12	4739.91	-189.94	-189.94	0.94	0.33	189.95	179.72
4775.00	3.44	198.45	4764.87	-191.34	-191.34	0.45	0.55	191.34	179.86
4800.00	3.14	193.13	4789.83	-192.72	-192.72	0.06	1.68	192.72	179.98

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
4825.00	2.98	189.39	4814.79	-194.02	-194.02	-0.20	1.05	194.02	180.06
4850.00	3.25	176.21	4839.76	-195.37	-195.37	-0.26	3.07	195.37	180.08
4875.00	3.20	167.01	4864.72	-196.76	-196.76	-0.05	2.08	196.76	180.02
4900.00	3.35	162.47	4889.68	-198.14	-198.14	0.32	1.19	198.14	179.91
4925.00	3.23	155.98	4914.64	-199.48	-199.48	0.83	1.56	199.48	179.76
4950.00	2.80	156.97	4939.60	-200.68	-200.68	1.35	1.73	200.69	179.61
4975.00	2.54	157.09	4964.57	-201.75	-201.75	1.81	1.03	201.76	179.49
5000.00	2.11	161.54	4989.55	-202.70	-202.70	2.17	1.87	202.71	179.39
5025.00	1.35	229.58	5014.54	-203.33	-203.33	2.09	8.15	203.34	179.41
5050.00	1.81	259.82	5039.53	-203.59	-203.59	1.48	3.73	203.60	179.58
5075.00	2.03	264.47	5064.52	-203.70	-203.70	0.65	1.08	203.71	179.82
5100.00	1.99	262.00	5089.51	-203.81	-203.81	-0.22	0.38	203.81	180.06
5125.00	1.87	259.33	5114.49	-203.94	-203.94	-1.05	0.58	203.95	180.29
5150.00	1.86	265.60	5139.48	-204.05	-204.05	-1.85	0.82	204.06	180.52
5175.00	1.83	266.53	5164.46	-204.11	-204.11	-2.66	0.15	204.12	180.75
5200.00	1.85	265.66	5189.45	-204.16	-204.16	-3.46	0.14	204.19	180.97
5225.00	1.66	260.38	5214.44	-204.25	-204.25	-4.22	1.00	204.29	181.18
5250.00	1.74	264.86	5239.43	-204.35	-204.35	-4.95	0.61	204.41	181.39
5275.00	1.58	264.64	5264.42	-204.41	-204.41	-5.67	0.62	204.49	181.59
5300.00	1.65	261.43	5289.41	-204.50	-204.50	-6.37	0.47	204.60	181.79
5325.00	1.78	264.83	5314.40	-204.59	-204.59	-7.12	0.64	204.71	181.99
5350.00	1.83	266.83	5339.39	-204.64	-204.64	-7.90	0.32	204.80	182.21
5375.00	1.68	263.15	5364.37	-204.71	-204.71	-8.66	0.73	204.89	182.42
5400.00	1.56	263.91	5389.36	-204.79	-204.79	-9.37	0.52	205.00	182.62
5425.00	1.67	268.67	5414.35	-204.83	-204.83	-10.07	0.70	205.08	182.81
5450.00	1.57	266.78	5439.34	-204.86	-204.86	-10.77	0.45	205.14	183.01
5475.00	1.69	264.60	5464.33	-204.92	-204.92	-11.48	0.53	205.24	183.21
5500.00	1.59	264.83	5489.32	-204.98	-204.98	-12.20	0.38	205.34	183.40
5525.00	1.55	259.76	5514.31	-205.07	-205.07	-12.88	0.58	205.48	183.59
5550.00	1.61	261.67	5539.30	-205.18	-205.18	-13.56	0.30	205.63	183.78
5575.00	1.57	262.27	5564.29	-205.28	-205.28	-14.24	0.17	205.77	183.97
5600.00	1.53	259.64	5589.29	-205.39	-205.39	-14.91	0.32	205.93	184.15

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
5625.00	1.53	255.14	5614.28	-205.53	-205.53	-15.56	0.48	206.12	184.33
5650.00	1.51	251.21	5639.27	-205.72	-205.72	-16.20	0.42	206.36	184.50
5675.00	1.56	251.05	5664.26	-205.94	-205.94	-16.83	0.19	206.63	184.67
5700.00	1.57	251.82	5689.25	-206.16	-206.16	-17.48	0.08	206.90	184.85
5725.00	1.58	251.60	5714.24	-206.37	-206.37	-18.13	0.06	207.17	185.02
5750.00	1.60	254.86	5739.23	-206.57	-206.57	-18.79	0.37	207.43	185.20
5775.00	1.62	257.61	5764.22	-206.74	-206.74	-19.48	0.32	207.66	185.38
5800.00	1.56	251.71	5789.21	-206.92	-206.92	-20.14	0.70	207.90	185.56
5825.00	1.66	255.62	5814.20	-207.12	-207.12	-20.82	0.61	208.16	185.74
5850.00	1.58	252.34	5839.19	-207.32	-207.32	-21.50	0.49	208.43	185.92
5875.00	1.54	247.91	5864.18	-207.55	-207.55	-22.14	0.52	208.72	186.09
5900.00	1.63	251.88	5889.17	-207.78	-207.78	-22.79	0.57	209.03	186.26
5925.00	1.61	252.12	5914.16	-208.00	-208.00	-23.46	0.08	209.32	186.44
5950.00	1.67	252.41	5939.15	-208.22	-208.22	-24.14	0.23	209.61	186.61
5975.00	1.68	255.22	5964.14	-208.42	-208.42	-24.84	0.33	209.90	186.80
6000.00	1.65	250.34	5989.13	-208.64	-208.64	-25.53	0.58	210.19	186.98
6025.00	1.54	254.82	6014.12	-208.85	-208.85	-26.20	0.66	210.48	187.15
6050.00	1.46	252.75	6039.11	-209.03	-209.03	-26.82	0.39	210.74	187.31
6075.00	1.50	255.02	6064.10	-209.21	-209.21	-27.44	0.29	211.00	187.47
6100.00	1.38	252.32	6089.10	-209.38	-209.38	-28.05	0.56	211.25	187.63
6125.00	1.31	254.57	6114.09	-209.55	-209.55	-28.61	0.35	211.49	187.77
6150.00	1.46	259.17	6139.08	-209.69	-209.69	-29.19	0.75	211.71	187.93
6175.00	1.36	258.98	6164.07	-209.80	-209.80	-29.80	0.40	211.91	188.08
6200.00	1.34	256.69	6189.07	-209.93	-209.93	-30.37	0.22	212.11	188.23
6225.00	1.45	256.18	6214.06	-210.07	-210.07	-30.96	0.43	212.34	188.38
6250.00	1.30	250.25	6239.05	-210.24	-210.24	-31.54	0.82	212.59	188.53
6275.00	1.31	252.57	6264.05	-210.42	-210.42	-32.08	0.21	212.85	188.67
6300.00	1.17	253.96	6289.04	-210.58	-210.58	-32.59	0.54	213.08	188.80
6325.00	1.12	253.01	6314.04	-210.72	-210.72	-33.07	0.22	213.30	188.92
6350.00	1.02	257.56	6339.03	-210.84	-210.84	-33.53	0.52	213.49	189.03
6375.00	1.16	261.06	6364.03	-210.93	-210.93	-33.99	0.59	213.65	189.16
6400.00	0.92	253.38	6389.02	-211.02	-211.02	-34.43	1.10	213.81	189.27

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
6425.00	1.03	259.44	6414.02	-211.12	-211.12	-34.85	0.62	213.98	189.37
6450.00	0.91	256.31	6439.02	-211.21	-211.21	-35.26	0.54	214.13	189.48
6475.00	0.97	259.79	6464.01	-211.29	-211.29	-35.66	0.33	214.28	189.58
6500.00	1.00	262.07	6489.01	-211.36	-211.36	-36.09	0.21	214.42	189.69
6525.00	1.00	254.44	6514.00	-211.45	-211.45	-36.52	0.53	214.58	189.80
6550.00	1.04	258.60	6539.00	-211.55	-211.55	-36.95	0.33	214.76	189.91
6575.00	1.02	260.52	6564.00	-211.64	-211.64	-37.39	0.15	214.91	190.02
6600.00	0.96	253.50	6588.99	-211.73	-211.73	-37.81	0.54	215.08	190.12
6625.00	0.94	253.31	6613.99	-211.85	-211.85	-38.21	0.07	215.27	190.22
6650.00	0.95	256.82	6638.99	-211.96	-211.96	-38.61	0.23	215.44	190.32
6675.00	0.98	256.58	6663.98	-212.05	-212.05	-39.01	0.13	215.61	190.43
6700.00	1.05	259.86	6688.98	-212.14	-212.14	-39.45	0.36	215.78	190.53
6725.00	1.03	260.49	6713.97	-212.22	-212.22	-39.90	0.10	215.94	190.65
6750.00	1.03	258.20	6738.97	-212.30	-212.30	-40.34	0.17	216.10	190.76
6775.00	1.09	263.06	6763.97	-212.38	-212.38	-40.79	0.42	216.26	190.87
6800.00	0.98	261.05	6788.96	-212.44	-212.44	-41.24	0.43	216.41	190.99
6825.00	0.98	255.94	6813.96	-212.53	-212.53	-41.66	0.35	216.57	191.09
6850.00	1.04	260.75	6838.95	-212.61	-212.61	-42.09	0.42	216.74	191.20
6875.00	1.10	262.13	6863.95	-212.68	-212.68	-42.55	0.24	216.90	191.31
6900.00	1.11	262.84	6888.95	-212.75	-212.75	-43.03	0.09	217.06	191.43
6925.00	1.03	257.88	6913.94	-212.82	-212.82	-43.49	0.51	217.22	191.55
6950.00	1.08	259.75	6938.94	-212.91	-212.91	-43.94	0.27	217.40	191.66
6975.00	0.97	257.45	6963.93	-213.00	-213.00	-44.38	0.47	217.58	191.77
7000.00	1.08	252.31	6988.93	-213.12	-213.12	-44.81	0.56	217.78	191.87
7025.00	1.12	255.79	7013.92	-213.25	-213.25	-45.27	0.31	218.00	191.99
7050.00	1.08	253.27	7038.92	-213.38	-213.38	-45.74	0.23	218.22	192.10
7075.00	1.16	255.73	7063.92	-213.51	-213.51	-46.21	0.36	218.45	192.21
7100.00	1.27	255.25	7088.91	-213.64	-213.64	-46.72	0.44	218.69	192.34
7125.00	1.19	250.32	7113.90	-213.80	-213.80	-47.23	0.51	218.95	192.46
7150.00	1.24	251.19	7138.90	-213.97	-213.97	-47.73	0.19	219.23	192.58
7175.00	1.24	255.26	7163.89	-214.13	-214.13	-48.25	0.35	219.50	192.70

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
7200.00	1.32	252.70	7188.89	-214.28	-214.28	-48.78	0.41	219.77	192.83
7225.00	1.40	255.82	7213.88	-214.44	-214.44	-49.36	0.43	220.05	192.96
7250.00	1.39	259.53	7238.87	-214.57	-214.57	-49.95	0.36	220.31	193.10
7275.00	1.34	253.83	7263.86	-214.71	-214.71	-50.53	0.58	220.58	193.24
7300.00	1.39	261.18	7288.86	-214.84	-214.84	-51.11	0.72	220.84	193.38
7325.00	1.38	260.82	7313.85	-214.93	-214.93	-51.71	0.06	221.07	193.53
7350.00	1.50	263.65	7338.84	-215.02	-215.02	-52.33	0.55	221.29	193.68
7375.00	1.42	262.69	7363.83	-215.09	-215.09	-52.96	0.31	221.52	193.83
7400.00	1.44	261.23	7388.83	-215.18	-215.18	-53.58	0.17	221.75	193.98
7425.00	1.52	260.77	7413.82	-215.28	-215.28	-54.22	0.32	222.01	194.14
7450.00	1.43	256.23	7438.81	-215.41	-215.41	-54.85	0.60	222.28	194.29
7475.00	1.53	261.50	7463.80	-215.53	-215.53	-55.48	0.67	222.56	194.44
7500.00	1.49	259.30	7488.79	-215.64	-215.64	-56.13	0.27	222.83	194.59
7525.00	1.45	244.44	7513.78	-215.84	-215.84	-56.74	1.53	223.17	194.73
7550.00	1.46	229.99	7538.78	-216.18	-216.18	-57.27	1.46	223.64	194.84
7575.00	1.45	230.90	7563.77	-216.58	-216.58	-57.76	0.09	224.15	194.93
7600.00	1.53	221.51	7588.76	-217.03	-217.03	-58.22	1.02	224.71	195.02
7625.00	1.41	230.55	7613.75	-217.48	-217.48	-58.68	1.04	225.26	195.10
7650.00	1.34	220.33	7638.74	-217.90	-217.90	-59.11	1.03	225.77	195.18
7675.00	1.88	274.84	7663.74	-218.09	-218.09	-59.71	6.20	226.11	195.31
7700.00	1.07	226.61	7688.73	-218.21	-218.21	-60.29	5.66	226.39	195.44
7725.00	0.86	217.48	7713.72	-218.52	-218.52	-60.57	1.03	226.76	195.49
7750.00	0.77	211.61	7738.72	-218.81	-218.81	-60.77	0.49	227.09	195.52
7775.00	0.78	206.12	7763.72	-219.11	-219.11	-60.93	0.30	227.42	195.54
7800.00	0.86	200.24	7788.72	-219.44	-219.44	-61.07	0.46	227.78	195.55
7825.00	1.33	214.16	7813.71	-219.85	-219.85	-61.30	2.13	228.24	195.58
7850.00	1.64	216.94	7838.70	-220.38	-220.38	-61.68	1.30	228.85	195.64
7875.00	1.76	218.69	7863.69	-220.97	-220.97	-62.13	0.49	229.54	195.71
7900.00	1.81	216.82	7888.68	-221.58	-221.58	-62.61	0.33	230.26	195.78
7925.00	1.81	218.66	7913.67	-222.21	-222.21	-63.09	0.23	230.99	195.85
7950.00	1.76	222.97	7938.66	-222.79	-222.79	-63.60	0.58	231.69	195.93
7975.00	1.67	227.36	7963.65	-223.32	-223.32	-64.13	0.63	232.35	196.02

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
8000.00	1.64	225.84	7988.64	-223.82	-223.82	-64.65	0.22	232.97	196.11
8025.00	1.58	236.57	8013.63	-224.26	-224.26	-65.20	1.22	233.54	196.21
8050.00	1.58	234.93	8038.62	-224.64	-224.64	-65.77	0.18	234.07	196.32
8075.00	1.66	243.41	8063.61	-225.00	-225.00	-66.37	1.01	234.59	196.44
8100.00	1.63	243.43	8088.60	-225.32	-225.32	-67.02	0.12	235.08	196.56
8125.00	1.57	244.42	8113.59	-225.63	-225.63	-67.64	0.28	235.55	196.69
8150.00	1.57	252.81	8138.58	-225.88	-225.88	-68.28	0.92	235.97	196.82
8175.00	1.39	249.93	8163.57	-226.08	-226.08	-68.89	0.77	236.35	196.95
8200.00	1.44	257.22	8188.56	-226.26	-226.26	-69.48	0.75	236.69	197.07
8225.00	1.44	257.43	8213.55	-226.40	-226.40	-70.09	0.04	237.00	197.20
8250.00	1.38	253.83	8238.55	-226.55	-226.55	-70.69	0.42	237.32	197.33
8275.00	1.48	257.90	8263.54	-226.70	-226.70	-71.29	0.58	237.65	197.46
8300.00	1.43	252.52	8288.53	-226.86	-226.86	-71.91	0.58	237.99	197.59
8325.00	1.45	254.93	8313.52	-227.04	-227.04	-72.51	0.25	238.34	197.71
8350.00	1.41	259.16	8338.51	-227.18	-227.18	-73.12	0.45	238.65	197.84
8375.00	1.43	256.74	8363.51	-227.31	-227.31	-73.72	0.26	238.96	197.97
8400.00	1.37	253.29	8388.50	-227.46	-227.46	-74.32	0.41	239.30	198.09
8425.00	1.40	259.20	8413.49	-227.61	-227.61	-74.90	0.58	239.62	198.22
8450.00	1.39	256.01	8438.48	-227.74	-227.74	-75.50	0.31	239.93	198.34
8475.00	1.41	257.70	8463.48	-227.88	-227.88	-76.09	0.19	240.25	198.47
8500.00	1.39	254.76	8488.47	-228.02	-228.02	-76.69	0.30	240.57	198.59
8525.00	1.31	253.52	8513.46	-228.18	-228.18	-77.25	0.35	240.91	198.70
8550.00	1.20	258.34	8538.46	-228.32	-228.32	-77.78	0.61	241.20	198.81
8575.00	1.14	260.56	8563.45	-228.41	-228.41	-78.28	0.29	241.45	198.92
8600.00	1.07	254.95	8588.45	-228.51	-228.51	-78.75	0.51	241.70	199.02
8625.00	1.07	254.75	8613.44	-228.63	-228.63	-79.21	0.02	241.97	199.11
8650.00	1.07	255.05	8638.44	-228.76	-228.76	-79.66	0.03	242.23	199.20
8675.00	0.99	258.20	8663.43	-228.86	-228.86	-80.09	0.38	242.47	199.29
8700.00	0.98	256.95	8688.43	-228.95	-228.95	-80.51	0.09	242.70	199.37
8725.00	0.99	258.74	8713.43	-229.04	-229.04	-80.93	0.13	242.92	199.46
8750.00	0.98	255.50	8738.42	-229.14	-229.14	-81.35	0.23	243.15	199.55
8775.00	1.06	255.21	8763.42	-229.25	-229.25	-81.78	0.30	243.40	199.63

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
8800.00	1.13	260.15	8788.41	-229.35	-229.35	-82.25	0.48	243.65	199.73
8825.00	1.08	258.72	8813.41	-229.44	-229.44	-82.72	0.23	243.90	199.83
8850.00	0.97	253.96	8838.40	-229.55	-229.55	-83.16	0.56	244.14	199.91
8875.00	1.06	258.94	8863.40	-229.65	-229.65	-83.59	0.50	244.39	200.00
8900.00	1.20	256.99	8888.40	-229.75	-229.75	-84.07	0.58	244.65	200.10
8925.00	1.41	258.47	8913.39	-229.87	-229.87	-84.63	0.84	244.95	200.21
8950.00	1.49	259.33	8938.38	-229.99	-229.99	-85.25	0.35	245.28	200.34
8975.00	1.48	256.82	8963.37	-230.13	-230.13	-85.88	0.27	245.63	200.46
9000.00	1.50	258.44	8988.36	-230.27	-230.27	-86.51	0.19	245.98	200.59
9025.00	1.49	254.08	9013.36	-230.42	-230.42	-87.15	0.45	246.35	200.72
9050.00	1.49	254.73	9038.35	-230.60	-230.60	-87.77	0.07	246.74	200.84
9075.00	1.46	258.49	9063.34	-230.75	-230.75	-88.40	0.41	247.10	200.96
9100.00	1.43	250.79	9088.33	-230.91	-230.91	-89.00	0.78	247.47	201.08
9125.00	1.43	255.58	9113.32	-231.09	-231.09	-89.60	0.48	247.85	201.19
9150.00	1.47	255.94	9138.32	-231.25	-231.25	-90.22	0.18	248.22	201.31
9175.00	1.48	255.86	9163.31	-231.40	-231.40	-90.84	0.02	248.60	201.43
9200.00	1.42	254.64	9188.30	-231.57	-231.57	-91.45	0.26	248.97	201.55
9225.00	1.23	255.05	9213.29	-231.72	-231.72	-92.01	0.78	249.31	201.66
9250.00	0.98	255.47	9238.29	-231.84	-231.84	-92.47	0.98	249.60	201.75
9275.00	0.90	257.22	9263.28	-231.94	-231.94	-92.87	0.34	249.84	201.82
9300.00	0.93	255.34	9288.28	-232.03	-232.03	-93.26	0.18	250.07	201.90
9325.00	1.10	246.08	9313.28	-232.18	-232.18	-93.68	0.94	250.37	201.97
9350.00	1.30	234.89	9338.27	-232.44	-232.44	-94.13	1.23	250.78	202.05
9375.00	1.69	230.67	9363.26	-232.84	-232.84	-94.65	1.63	251.34	202.12
9400.00	2.16	227.47	9388.25	-233.39	-233.39	-95.28	1.90	252.09	202.21
9425.00	2.40	225.92	9413.23	-234.07	-234.07	-96.00	0.98	252.99	202.30
9450.00	2.30	227.00	9438.21	-234.78	-234.78	-96.74	0.41	253.93	202.40
9475.00	2.17	229.14	9463.19	-235.43	-235.43	-97.47	0.63	254.81	202.49
9500.00	1.86	239.61	9488.17	-235.95	-235.95	-98.18	1.92	255.56	202.59
9525.00	1.64	255.90	9513.16	-236.24	-236.24	-98.88	2.17	256.10	202.71
9550.00	1.57	270.48	9538.15	-236.32	-236.32	-99.56	1.65	256.44	202.85

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
9575.00	1.59	275.56	9563.14	-236.29	-236.29	-100.25	0.57	256.67	202.99
9600.00	1.67	277.31	9588.13	-236.21	-236.21	-100.96	0.37	256.88	203.14
9625.00	1.63	276.01	9613.12	-236.12	-236.12	-101.67	0.21	257.08	203.30
9650.00	1.83	283.64	9638.11	-235.99	-235.99	-102.41	1.22	257.25	203.46
9675.00	2.05	291.20	9663.10	-235.73	-235.73	-103.22	1.35	257.34	203.65
9700.00	2.10	295.35	9688.08	-235.38	-235.38	-104.05	0.63	257.35	203.85
9725.00	2.23	296.85	9713.06	-234.96	-234.96	-104.90	0.56	257.31	204.06
9750.00	2.17	299.91	9738.04	-234.50	-234.50	-105.74	0.54	257.24	204.27
9775.00	1.76	326.13	9763.03	-233.95	-233.95	-106.37	3.90	257.00	204.45
9800.00	1.71	337.81	9788.02	-233.29	-233.29	-106.72	1.43	256.54	204.58
9825.00	1.63	341.98	9813.01	-232.60	-232.60	-106.97	0.58	256.02	204.70
9850.00	1.65	343.75	9838.00	-231.92	-231.92	-107.18	0.22	255.49	204.80
9875.00	1.62	341.90	9862.99	-231.23	-231.23	-107.39	0.24	254.96	204.91
9900.00	1.32	347.43	9887.98	-230.62	-230.62	-107.57	1.35	254.47	205.01
9925.00	1.18	3.40	9912.97	-230.08	-230.08	-107.61	1.49	254.00	205.07
9950.00	1.31	26.96	9937.97	-229.57	-229.57	-107.47	2.09	253.48	205.09
9975.00	1.36	45.75	9962.96	-229.11	-229.11	-107.13	1.75	252.92	205.06
10000.00	1.37	64.78	9987.95	-228.78	-228.78	-106.65	1.81	252.41	204.99
10025.00	1.48	79.15	10012.95	-228.59	-228.59	-106.06	1.50	251.99	204.89
10050.00	1.40	91.12	10037.94	-228.53	-228.53	-105.43	1.25	251.68	204.77
10075.00	1.54	99.75	10062.93	-228.59	-228.59	-104.80	1.05	251.47	204.63
10100.00	1.39	101.62	10087.92	-228.71	-228.71	-104.17	0.63	251.32	204.49
10125.00	1.30	108.26	10112.92	-228.86	-228.86	-103.60	0.71	251.22	204.36
10150.00	1.27	116.52	10137.91	-229.08	-229.08	-103.09	0.75	251.20	204.23
10175.00	1.25	118.69	10162.90	-229.33	-229.33	-102.60	0.20	251.23	204.10
10200.00	1.20	117.84	10187.90	-229.58	-229.58	-102.13	0.23	251.27	203.98
10225.00	1.32	121.36	10212.89	-229.85	-229.85	-101.65	0.57	251.33	203.86
10250.00	1.45	128.19	10237.88	-230.20	-230.20	-101.16	0.84	251.44	203.72
10275.00	1.41	126.42	10262.88	-230.58	-230.58	-100.66	0.23	251.59	203.59
10300.00	1.47	129.77	10287.87	-230.96	-230.96	-100.17	0.42	251.75	203.45
10325.00	1.51	131.31	10312.86	-231.39	-231.39	-99.68	0.24	251.94	203.31
10350.00	1.53	128.97	10337.85	-231.81	-231.81	-99.17	0.26	252.14	203.16

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DIST	CLOSURE DIR
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
10375.00	1.50	128.93	10362.84	-232.23	-232.23	-98.65	0.13	252.32	203.02
10400.00	1.19	118.55	10387.84	-232.56	-232.56	-98.17	1.56	252.43	202.89
10425.00	1.06	87.28	10412.83	-232.67	-232.67	-97.71	2.49	252.36	202.78
10450.00	0.84	77.82	10437.83	-232.63	-232.63	-97.30	1.08	252.15	202.70
10475.00	0.32	87.74	10462.83	-232.58	-232.58	-97.05	2.11	252.02	202.65
10500.00	0.25	173.32	10487.83	-232.63	-232.63	-96.97	1.56	252.04	202.63
10525.00	0.61	179.78	10512.83	-232.82	-232.82	-96.97	1.48	252.21	202.61
10550.00	0.94	182.26	10537.82	-233.16	-233.16	-96.97	1.32	252.52	202.58
10575.00	1.03	180.92	10562.82	-233.59	-233.59	-96.99	0.37	252.93	202.55
10600.00	1.14	174.75	10587.82	-234.07	-234.07	-96.97	0.64	253.36	202.50
10625.00	1.36	179.10	10612.81	-234.61	-234.61	-96.94	0.94	253.85	202.45
10650.00	1.52	177.66	10637.80	-235.24	-235.24	-96.92	0.65	254.42	202.39
10675.00	1.52	182.46	10662.79	-235.90	-235.90	-96.92	0.51	255.03	202.34
10700.00	1.41	184.83	10687.78	-236.54	-236.54	-96.96	0.48	255.64	202.29
10725.00	1.31	185.13	10712.78	-237.13	-237.13	-97.01	0.43	256.20	202.25
10750.00	1.17	194.48	10737.77	-237.66	-237.66	-97.10	0.98	256.73	202.22
10775.00	1.26	194.76	10762.77	-238.17	-238.17	-97.24	0.37	257.25	202.21
10800.00	1.27	194.88	10787.76	-238.70	-238.70	-97.38	0.06	257.80	202.19
10825.00	1.38	196.36	10812.75	-239.26	-239.26	-97.53	0.42	258.38	202.18
10850.00	1.32	198.51	10837.75	-239.82	-239.82	-97.71	0.31	258.96	202.17
10875.00	1.23	198.77	10862.74	-240.35	-240.35	-97.89	0.32	259.52	202.16
10900.00	1.12	201.34	10887.73	-240.83	-240.83	-98.06	0.50	260.03	202.16
10925.00	1.11	194.38	10912.73	-241.29	-241.29	-98.21	0.54	260.51	202.15
10950.00	0.92	199.94	10937.73	-241.72	-241.72	-98.34	0.87	260.95	202.14
10975.00	0.83	203.63	10962.72	-242.07	-242.07	-98.48	0.43	261.33	202.14
11000.00	0.81	212.75	10987.72	-242.38	-242.38	-98.65	0.52	261.69	202.15

OPERATOR: PDEH LLC

WELL LOCATION

LEASE NAME & WELL NO.:

UL 20 GOLD SPOON 2901H

LEASE ACREAGE:

640.700 ACRES (CALLED)

NEAREST TOWN IN COUNTY:

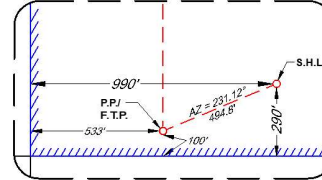
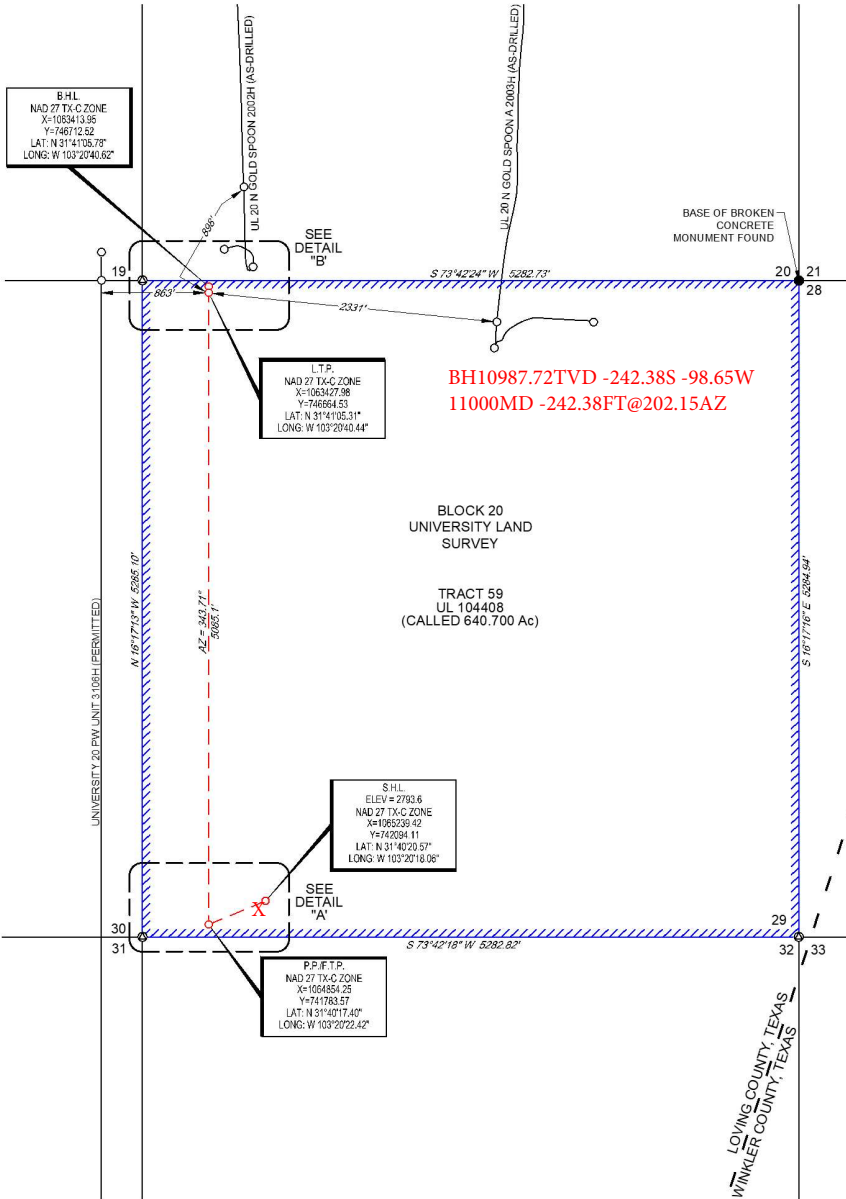
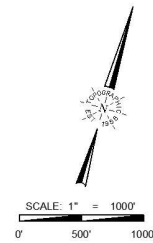
±15.5 MILES SOUTHEAST OF MENTONE, TEXAS

DESCRIPTION:

S.H.L./P.P./F.T.P.: SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY

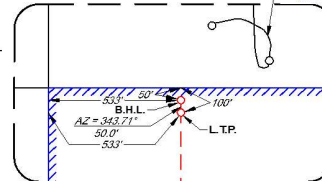
L.T.P./B.H.L.: SECTION 29, BLOCK 20, UNIVERSITY LAND SURVEY

LOVING COUNTY, TEXAS



DETAIL VIEW "A"

SCALE: 1" = 300'



DETAIL VIEW "B"

SCALE: 1" = 300'

PRODUCTIVE LATERAL

LENGTH (F.T. TO L.T.P.)	
1	5,085'
TOTAL	5,085'

TIES TABLE

POINT	LEASE	SURVEY/SECTION
S.H.L.	990' FSWL & 290' FSEL	990' FSWL & 290' FSEL
P.P./F.T.P.	533' FSWL & 100' FSEL	533' FSWL & 100' FSEL
L.T.P.	100' FNWL & 533' FSWL	100' FNWL & 533' FSWL
B.H.L.	50' FNWL & 533' FSWL	50' FNWL & 533' FSWL

LEGEND:

	Lease Boundary
	Approximate Location County Line
	Section Line
	Proposed Well Path
	Existing/Permitted Well Path
	Monument Found
	Calculated Corner
	Well Point



John R. Anderson 9/6/2022
John R. Anderson, R.P.L.S. No. 6442



1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

	REVISION:	
	INT	DATE
UL-20-29-P3 UL 20 GOLD SPOON #2901H		
DATE: 07/11/2022		
FILE: LO_20_29_P3_GOLD_SPOON_#2901H_REV1		
DRAWN BY: A.C.L./O.M.		
SHEET: 1 OF 1		

NOTES:

1. ORIGINAL DOCUMENT SIZE: 11" X 17"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1983, UNLESS OTHERWISE NOTED.
3. THIS LOCATION AND/OR UNIT/LEASE BOUNDARY HAS BEEN CAREFULLY SURVEYED ON THE GROUND UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE ACCORDING TO THE EVIDENCE, OFFICIAL SURVEY RECORDS, MAPS, AND OTHER DATA PROVIDED BY PERMAN DELAWARE ENTERPRISES HOLDINGS, LLC. THIS PLAT WAS CREATED FOR THE SOLE PURPOSE OF FILING A PERMIT WITH THE RAILROAD COMMISSION OF TEXAS AND SHOULD NOT BE CONSTRUED AS A "BOUNDARY SURVEY" IN COMPLIANCE WITH T.B.P.L.S. MINIMUM STANDARDS OF PROCEDURES FOR BOUNDARY SURVEYS. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
4. ALL ELEVATION VALUES CONTAINED HEREON ARE ORTHOMETRIC ONLY, BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), U.S. SURVEY FEET.
5. ALL MINERAL OWNERSHIP DATA SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY PERMAN DELAWARE ENTERPRISES HOLDINGS, LLC OR ITS SUBSIDIARIES & AFFILIATES.

NOTES CONT'D:

6. THE PRELIMINARY LOCATION HAS BEEN CAREFULLY SURVEYED ON THE GROUND DURING THE DATE OF JUNE 15, 2022.
7. S.H.L. = SURFACE HOLE LOCATION
8. P.P. = POINT OF PENETRATION
9. F.T.P. = FIRST TAKE POINT
10. L.T.P. = LAST TAKE POINT
11. B.H.L. = BOTTOM HOLE LOCATION



Scientific Drilling International, Inc.

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Odessa, Texas 79765

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www.scientificdrilling.com

State of Texas
County of Midland

I, Troy Duane Morgan, certify that; I am employed by Scientific Drilling International; that I did on the day(s) of 2/9/2023 through 2/10/2023 conduct or supervise the taking of a Keeper Gyro survey from a depth of 100 feet to a depth of 11,000 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Scientific Drilling International; that I am authorized and qualified to make this report; that this survey was conducted at the request of ConocoPhillips for the UL 20 Gold Spoon #2901H Well, API# 42-301-36071 in Loving County, Texas; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Scientific Drilling International.


Field Technician