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

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45105	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 321650	⁵ Property Name HH SO 17 20 FED 002	⁶ Well Number 2H
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁹ Elevation 3248'

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
B	17	26 SOUTH	27 EAST, N.M.P.M.		212'	NORTH	1700'	EAST	EDDY

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
O	20	26 SOUTH	27 EAST, N.M.P.M.		25'	SOUTH	2010'	EAST	EDDY

¹² Dedicated Acres 640	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.

¹⁶ HH SO 17 20 FED 002 2H WELL X= 538,297 NAD 27 Y= 381,474 LAT. 32.048726 LONG. 104.209727 X= 579,481 NAD83 Y= 381,531 LAT. 32.048848 LONG. 104.210221 MID POINT X= 538,344 NAD 27 Y= 376,477 LAT. 32.034989 LONG. 104.209594 X= 579,528 NAD83 Y= 376,534 LAT. 32.035111 LONG. 104.210087 PROPOSED LAST TAKE POINT X= 538,379 NAD 27 Y= 371,479 LAT. 32.021249 LONG. 104.209500 X= 579,563 NAD83 Y= 371,536 LAT. 32.021372 LONG. 104.209993 CORNER COORDINATES TABLE (NAD 27) A - Y=381810.94, X=534988.20 B - Y=381799.23, X=540303.95 C - Y=376480.27, X=535066.16 D - Y=376474.90, X=540354.10 E - Y=371149.70, X=535082.62 F - Y=371148.59, X=540391.30 PROPOSED BOTTOM HOLE LOCATION X= 538,381 NAD 27 Y= 371,174 LAT. 32.020411 LONG. 104.209494 X= 579,555 NAD83 Y= 371,231 LAT. 32.020533 LONG. 104.209987	Proposed First Take Point 330' FNL, 2010' FEL Proposed Last Take Point 330' FSL, 2010' FEL Sec. 17 Sec. 20 Mid Point S 69°16'03" W 330.83' S 00°32'23" E 4,996.94' S 00°24'02" E 5,303.05' 212' 1700' 25' 2010'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>[Signature]</i> 9/18/2019 Signature Date Laura Becerra Printed Name L.Becerra@Chevron.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. 06/15/2017 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor STEVEN M. COLEMAN NEW MEXICO 22921 PROFESSIONAL SURVEYOR Certificate Number 07/22/2019
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Ref 10-30-19

Delaware Basin Changes to APD/COA for Federal Well



Well Name:

Well Name		API #
HH SO 17 20 FED 002	2H	30-015-45105

Rig: Patterson 257

CVX CONTACT:

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MCBU D&C Engineer – Patterson 257
Chevron North America Exploration and Production Co.
MidContinent Business Unit
Office: (713) 372-9032
Cell: (832) 963-9814
Email: Hannah.wardo@chevron.com

Summary of Changes to original APD

Chevron USA Inc is requesting the following changes to the original APD approved 7/6/2018:

- FTP - From: 330' FNL, 1,170' FEL (LAT: 32.048840/LONG: -104.207510)
To: 330' FNL, 2,010' FEL (LAT: 32.048848/LONG: -104.210221)

LTP - From: 330' FSL, 1,170' FEL (LAT: 32.021369/LONG: -104.207282)
To: 330' FSL, 2,010' FEL (LAT: 32.021372/LONG: -104.209993)

BHL - From: 280' FSL, 330' FEL (LAT: 32.021231/LONG: -104.207281)
To: 25' FSL, 2,010' FEL (LAT: 32.020533/LONG: -104.209987)
- TVD/MD: 10,029'/20,402' to 9,718'/20,429'
- A variance from the Onshore Order 2 where it states "(A full BOP Test) shall be performed: when initially installed and whenever any seal subject to test pressure is broken." We propose to break test if able to finish the next hole section within 21 days of the previous full BOP test. Upon the first nipple up of the pad a full BOP test will be performed. A break test will consist of a 250 psi low / $\geq$ 5,000 psi high 10 min ea test against the connection that was broken when skidding the rig. A break test will not be performed on our last production section. A break test will only be performed on operations where BLM documentation states a 5M or less BOP can be utilized.

See drilling sequence below that indicates the potential hole sections break testing can be performed given they meet the above criteria.

Option 4: skid after int:1 and int 2 drilled on each well; skid 5*, 3*, 1, 2*, 5*, 4.

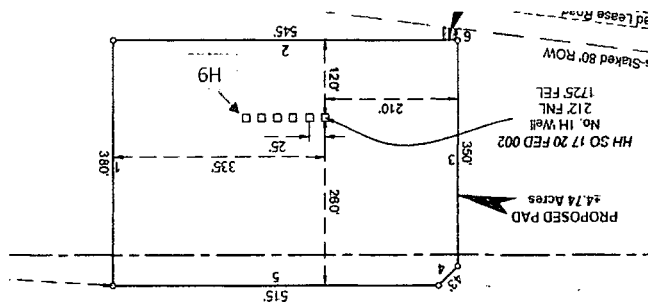
* = offline

Drilling Sequence & Slot Designation

HNM 26 27 Sec 17 20 Pad 93, Pkg 6

	6H (WCC)	5H (WCA)	4H (WCD)	3H (WCA)	2H (WCC)	1H (WCA)	
Surface (drilled by surface rig)	X	X	X	X	X	X	↑ South
Int1	11	9	7	5	3	1	brine
Int2	12	10	8	6	4	2	cut brine
Production	17*	13*	18	14*	16	15	OBM

trailers



Pad Summary

The table below lists all the wells for the given pad and their respective name and TVD's (ft) for their production target intervals:

Well Name(s)	Target TVD	Formation Desc.
HH SO 17 20 FED 002 1H	9,109	Wolfcamp A
HH SO 17 20 FED 002 2H	9,718	Wolfcamp C
HH SO 17 20 FED 002 3H	9,188	Wolfcamp A
HH SO 17 20 FED 002 4H	9,849	Wolfcamp D
HH SO 17 20 FED 002 5H	9,111	Wolfcamp A
HH SO 17 20 FED 002 6H	9,720	Wolfcamp C

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

Elevation: 3275 ft

FORMATION	SUB-SEA TVD	TVD	MD	LITHOLOGIES	MIN. RESOURCES	PROD. FORMATION
Rustler	3275		-	ANHYD	N/A	
Salado	2630	645	645	SALT	N/A	
Lamar	1177	2,098	2,098	LIMESTONE	N/A	
Bell Canyon	1148	2,127	2,127	SAND STONE	N/A	
Cherry Canyon	325	2,950	2,950	SAND STONE	N/A	
Brushy Canyon	-791	4,066	4,066	SAND STONE	N/A	
Bone Spring Limestone	-2400	5,675	5,675	LIMESTONE	N/A	
Avalon	-2543	5,818	5,818	SHALE	Oil	
Top Bone Spring 1	-3324	6,599	6,599	SHALE	Oil	
Top Bone Spring 2	-3857	7,132	7,132	SHALE	Oil	
Top Bone Spring 3	-4973	8,248	8,248	SHALE	Oil	
WCA	-5577	8,852	8,852	SHALE	Oil	
WCAB	-6045	9,320	9,415	SHALE	Oil	
WCC Target	-6443	9,718	10,127	SHALE	Oil	Yes

WELLBORE LOCATIONS	SUB-SEA TVD	RKB TVD	MD
SHL	3275	-	-
KOP	-5839	9,114	9,164
FTP	-6443	9,718	10,127
LTP	-6443	9,718	20,429

Bottom hole temperature:	150 degrees F
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2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expected Base of Fresh Water		450
Water	Rustler	-
Water	Salado	645
Water	Lamar	2,098
Oil/Gas	Bell Canyon	2,127
Oil/Gas	Cherry Canyon	2,950
Oil/Gas	Brushy Canyon	4,066
Oil/Gas	Bone Spring Limestone	5,675
Oil/Gas	Avalon	5,818
Oil/Gas	Top Bone Spring 1	6,599
Oil/Gas	Top Bone Spring 2	7,132
Oil/Gas	Top Bone Spring 3	8,248
Oil/Gas	WCA	8,852
Oil/Gas	WCAB	9,320
Oil/Gas	WCC Target	9,718

All shows of fresh water and minerals will be reported and protected.

3. BOP EQUIPMENT

Chevron will have a minimum of a 5,000 psi rig stack (see proposed schematic) for drill out below surface casing. The stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed per hole section, unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs and variance). BOP test will be conducted by a third party.

Chevron requests a variance to use a FMC Technologies UH-S Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipped up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC Technologies and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. All tests performed by third party.

4. CASING PROGRAM

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	450'	17-1/2"	13-3/8"	54.5 #	J-55	STC/BTC	New
Intermediate	0'	2,100'	12-1/4"	9-5/8"	43.5 #	L-80	LTC	New
INT2 Liner	1,800'	9,100'	8-1/2"	7-5/8"	29.7 #	P-110	W-513	New
Production (Tapered String)	0'	8,600'	6-3/4"	5-1/2"	20.0 #	P-110	TXP-BTC	New
	0'	20,429'	6-3/4"	5"	18.0 #	P-110	W-521	New

Purpose	Hole Size	Casing Size	Top (MD)	Btm (MD)	Top (TVD)	Btm (TVD)	Top (SSTVD)	Btm (SSTVD)	Grade	Weight	Joint type
Surface	17-1/2"	13-3/8"	0'	450'	0'	450'	3,275'	2,825'	J-55	54.5 #	STC/BTC
Intermediate	12-1/4"	9-5/8"	0'	2,100'	0'	2,100'	3,275'	1,175'	L-80	43.5 #	LTC
Intermediate Liner	8-1/2"	7-5/8"	1,800'	9,100'	1,800'	9,100'	1,475'	-5,825'	P110	29.7 #	W-513
Production (Tapered String)	6-3/4"	5-1/2"	0'	8,600'	0'	7,900'	3,275'	-4,625'	P110	20.0 #	TXP-BTC
	6-3/4"	5"	8,600'	20,429'	7,900'	9,718'	-4,625'	-6,443'	P110	18.0 #	W-521

b. Casing design subject to revision based on geologic conditions encountered.

A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the

c. casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.

d. Chevron will fill casing at a minimum of every 20 Jts (~840') while running for intermediate and production casing in order to maintain collapse SF.

SF Calculations based on the following "Worst Case" casing design:

Surface Casing:	450'	ftTVD
Intermediate Casing:	2,100'	ftTVD
INT2 Liner	9,100'	ftTVD
Production Casing:	20,429'	ftMD (10,415' VS)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.48	2.10	4.91	1.80
Intermediate	1.52	1.87	2.79	1.83
Intermediate	1.33	2.59	1.60	1.66
Production	1.10	1.39	1.61	1.32

The following worst case load cases were considered for calculation of the above Min. Safety Factors:

Burst Design	Surf	Int	Prod
Pressure Test- Surface, Int, Prod Csg			
P external: Mud weight above TOC, PP below	X	X	X
P internal: Test psi + next section heaviest mud in csg			
Displace to Gas- Surf Csg	X		
P external: Mud weight above TOC, PP below			
P internal: Dry Gas from Next Csg Point			
Gas over mud (60/40) - Int Csg		X	
P external: Mud weight above TOC, PP below			
P internal: 60% gas over 40% mud from hole TD PP			
Stimulation (Frac) Pressures- Prod Csg			X
P external: Mud weight above TOC, PP below			
P internal: Max inj pressure w/ heaviest injected fluid			
Tubing leak- Prod Csg (packer at KOP)			X
P external: Mud weight above TOC, PP below			
P internal: Leak just below surf, 8.45 ppg packer fluid			
Collapse Design	Surf	Int	Prod
Full Evacuation	X	X	X
P external: Mud weight gradient			
P internal: none			
Cementing- Surf, Int, Prod Csg	X	X	X
P external: Wet cement			
P internal: displacement fluid - water			
Tension Design	Surf	Int	Prod
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	Sacks	Yield	Density	%Excess	Water	Volume	Additives
Surface					(cu ft/sk)	(ppg)	Open Hole	gal/sk	cuft	
Tail	Class C	0'	450'	488	1.34	14.8	50	6.40	654	Extender, Antifoam, Retarder
Intermediate Csg										
Lead	Class C	0'	1,100'	398	1.73	12.8	100	9.26	689	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	1,100'	2,100'	334	1.33	14.8	30	6.38	445	Extender, Antifoam, Retarder, Viscosifier
Intermediate 2 Csg										
Lead	Class C	1,800'	8,600'	517	2.43	11.9	140	12.54	1256	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	8,600'	9,100'	43	1.335	14.8	50	6.29	58	Extender, Antifoam, Retarder, Viscosifier
Production										
Lead	Class H	8,600'	19,429'	1301	1.4	14.5	50	9.85	1822	Extender, Antifoam, Retarder, Viscosifier
Tail	Class H	19,429'	20,429'	78	2.16	15	50	9.22	168	Extender, Antifoam, Retarder, Viscosifier

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one solid body type centralizer on every joint in the lateral, then every other joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing and surface.

6. **MUD PROGRAM**

From	To	TVD Top	TVD Btm	Type	Weight	Viscosity	Filtrate
0'	450'	0'	880'	Fresh water mud	8.3 - 9.0	28-30	N/C
450'	2,100'	880'	2,100'	Brine/OBM	8.8 - 10.6	28-70	15-30
2,100'	9,100'	2,100'	9,100'	Cut Brine/OBM	8.8 - 10.0	28-70	15-30
9,100'	20,429'	9,100'	9,718'	OBM	9.5 - 13.0	50-70	10 - 25

A closed system will be used consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. And transporting of E&P waste will follow EPA regulations and accompanying manifests.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. **TESTING, LOGGING, AND CORING**

The anticipated type and amount of testing, logging, and coring are as follows:

- a. Drill stem tests are not planned.
- b. The logging program will be as follows:

TYPE	Logs	Interval	Timing
Mudlogs	2 man mudlog	Surface casing shoe through prod hole TD	While drilling or circulating
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling

- c. Conventional whole core samples are not planned.
- d. A directional survey will be run.

8. **ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

- a. No abnormal pressure or temperatures are expected. Estimated BHP is: psi (MASP)
- b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

PLANNED WELLPATH REPORT (CSV version)

Prepared by Baker Hughes, a GE company

Software System: WellArchitect® 5.1

REFERENCE WELLPATH IDENTIFICATION

Operator Chevron U.S.A. Inc.
 Area Eddy County, NM
 Field Purple Sage, Wolfcamp (Eddy Co., NM) NAD 27
 Facility HNM 26 27 Pkg 6 Pad 93
 Slot HH SO 17 20 Fed 002 No. 2H
 Well HH SO 17 20 Fed 002 No. 2H
 Wellbore HH SO 17 20 Fed 002 No. 2H PWB
 Wellpath HH SO 17 20 Fed 002 No. 2H Rev-A.0
 Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
 North Refe Grid
 Scale 0.999911
 Convergence 0.07° East
 Software S WellArchitect® 5.1
 User Moyagusa
 Report Ger 27/Aug/2019 at 11:02
 DataBase/ WA_HOU_Midland_Defn/ev1560.xml

WELLPATH Local North	Local East	Easting	Northing	Latitude	Longitude
[ft]	[ft]	[US ft]	[US ft]		
Slot Location	0	25	538606	381591 32°02'56.5"	104°12'31.426"W
Facility Ref			538581	381591 32°02'56.5"	104°12'31.716"W
Field Ref		152400.3		0 30°59'42.8"	105°26'33.659"W

WELLPATH DATUM

Calculation Minimum curvature
 Horizontal Slot
 Vertical Re Patterson 257 (KB)
 MD Refere Patterson 257 (KB)
 Field Vertic Mean Sea Level
 Patterson : 3276.00ft
 Patterson : 3276.00ft
 Patterson : 28.00ft
 Section Ori N 0.00, E 0.00 ft
 Section Azi 179.53°

WELLPATH DATA † = interpolated, ‡ = extrapolated station

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Build Rate	Turn Rate	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[°/100ft]	[°/100ft]	[°/100ft]	
†	0	0	146.5	0	0	0	538606	381591	32°02'56.5"	104°12'31.4	0	0	0	
	28	0	146.5	28	0	0	538606	381591	32°02'56.5"	104°12'31.4	0	0	0	
	166.4	1.8	146.5	166.38	1.82	-1.81	1.2	538607.2	381589.2	32°02'56.5"	104°12'31.4	1.3	1.3	105.85
	259.4	2.3	148.5	259.32	4.65	-4.62	2.98	538609	381586.4	32°02'56.5"	104°12'31.4	0.54	0.54	2.15
	325.4	2.2	149.5	325.27	6.88	-6.84	4.32	538610.3	381584.2	32°02'56.5"	104°12'31.4	0.16	-0.15	1.52
	415.4	2	148.5	415.21	9.72	-9.67	6.01	538612	381581.3	32°02'56.4"	104°12'31.4	0.23	-0.22	-1.11 Tie On
†	515.4	2	148.5	515.15	12.71	-12.65	7.84	538613.8	381578.4	32°02'56.4"	104°12'31.4	0	0	0
†	615.4	2	148.5	615.08	15.7	-15.62	9.66	538615.7	381575.4	32°02'56.4"	104°12'31.4	0	0	0
	650.34	2	148.5	650	16.74	-16.66	10.3	538616.3	381574.3	32°02'56.4"	104°12'31.4	0	0	0 Start Build,
†	715.4	1.106	163.604	715.04	18.32	-18.23	11.07	538617.1	381572.8	32°02'56.3"	104°12'31.4	1.5	-1.37	23.21
†	815.4	0.817	265.085	815.03	19.3	-19.22	10.63	538616.6	381571.8	32°02'56.3"	104°12'31.4	1.5	-0.29	101.48
†	915.4	2.148	295.391	915	18.54	-18.48	8.23	538614.2	381572.5	32°02'56.3"	104°12'31.4	1.5	1.33	30.31
	973.82	3	300	973.36	17.29	-17.24	5.91	538611.9	381573.8	32°02'56.4"	104°12'31.4	1.5	1.46	7.89 Cont. Build
†	1015.4	3.389	308.779	1014.87	15.96	-15.93	4.01	538610	381575.1	32°02'56.4"	104°12'31.4	1.5	0.93	21.11
†	1115.4	4.543	322.815	1114.63	10.92	-10.92	-0.68	538605.3	381580.1	32°02'56.4"	104°12'31.4	1.5	1.15	14.04
†	1215.4	5.856	330.893	1214.22	3.26	-3.31	-5.56	538600.4	381587.7	32°02'56.5"	104°12'31.4	1.5	1.31	8.08
†	1315.4	7.241	335.958	1313.57	-6.99	6.9	-10.61	538595.4	381597.9	32°02'56.6"	104°12'31.4	1.5	1.39	5.07
†	1415.4	8.665	339.386	1412.6	-19.84	19.71	-15.83	538590.2	381610.7	32°02'56.7"	104°12'31.4	1.5	1.42	3.43
†	1515.4	10.111	341.847	1511.26	-35.28	35.1	-21.22	538584.8	381626.1	32°02'56.9"	104°12'31.4	1.5	1.45	2.46
†	1615.4	11.57	343.695	1609.47	-53.29	53.07	-26.77	538579.2	381644.1	32°02'57.0"	104°12'31.4	1.5	1.46	1.85
	1653.11	12.123	344.277	1646.38	-60.75	60.51	-28.9	538577.1	381651.5	32°02'57.1"	104°12'31.4	1.5	1.47	1.54 End Build/
†	1715.4	12.123	344.277	1707.28	-73.37	73.1	-32.45	538573.6	381664.1	32°02'57.2"	104°12'31.4	0	0	0
†	1815.4	12.123	344.277	1805.05	-93.63	93.32	-38.14	538567.9	381684.3	32°02'57.4"	104°12'31.4	0	0	0
†	1915.4	12.123	344.277	1902.82	-113.89	113.53	-43.83	538562.2	381704.5	32°02'57.6"	104°12'31.4	0	0	0
†	2015.4	12.123	344.277	2000.59	-134.15	133.75	-49.52	538556.5	381724.7	32°02'57.8"	104°12'31.4	0	0	0
†	2115.4	12.123	344.277	2098.36	-154.41	153.96	-55.21	538550.8	381745	32°02'58.0"	104°12'32.1	0	0	0
†	2215.4	12.123	344.277	2196.13	-174.67	174.18	-60.9	538545.1	381765.2	32°02'58.2"	104°12'32.1	0	0	0
†	2315.4	12.123	344.277	2293.9	-194.93	194.39	-66.59	538539.4	381785.4	32°02'58.4"	104°12'32.1	0	0	0
†	2415.4	12.123	344.277	2391.67	-215.19	214.61	-72.28	538533.7	381805.6	32°02'58.6"	104°12'32.1	0	0	0

+	2515.4	12.123	344.277	2489.44	-235.46	234.82	-77.97	538528	381825.8	32°02'58.8" 104°12'32.0"	0	0	0
+	2615.4	12.123	344.277	2587.21	-255.72	255.04	-83.66	538522.3	381846	32°02'59.0" 104°12'32.0"	0	0	0
+	2715.4	12.123	344.277	2684.98	-275.98	275.25	-89.35	538516.7	381866.2	32°02'59.2" 104°12'32.0"	0	0	0
+	2815.4	12.123	344.277	2782.75	-296.24	295.47	-95.05	538511	381886.4	32°02'59.4" 104°12'32.0"	0	0	0
+	2915.4	12.123	344.277	2880.52	-316.5	315.69	-100.74	538505.3	381906.7	32°02'59.6" 104°12'32.0"	0	0	0
+	3015.4	12.123	344.277	2978.29	-336.76	335.9	-106.43	538499.6	381926.9	32°02'59.8" 104°12'32.0"	0	0	0
+	3115.4	12.123	344.277	3076.06	-357.02	356.12	-112.12	538493.9	381947.1	32°03'00.0" 104°12'32.0"	0	0	0
+	3215.4	12.123	344.277	3173.83	-377.28	376.33	-117.81	538488.2	381967.3	32°03'00.2" 104°12'32.0"	0	0	0
	3308.47	12.123	344.277	3264.82	-396.14	395.14	-123.11	538482.9	381986.1	32°03'00.4" 104°12'32.0"	0	0	Start Drop
+	3315.4	12.019	344.277	3271.6	-397.54	396.54	-123.5	538482.5	381987.5	32°03'00.4" 104°12'32.0"	1.5	-1.5	0
+	3415.4	10.519	344.277	3369.67	-416.39	415.35	-128.79	538477.2	382006.3	32°03'00.6" 104°12'32.0"	1.5	-1.5	0
+	3515.4	9.019	344.277	3468.22	-432.76	431.68	-133.39	538472.6	382022.6	32°03'00.8" 104°12'32.0"	1.5	-1.5	0
+	3615.4	7.519	344.277	3567.18	-446.64	445.53	-137.29	538468.7	382036.5	32°03'00.9" 104°12'32.0"	1.5	-1.5	0
+	3715.4	6.019	344.277	3666.48	-458.01	456.87	-140.48	538465.5	382047.8	32°03'01.0" 104°12'32.0"	1.5	-1.5	0
+	3815.4	4.519	344.277	3766.05	-466.87	465.71	-142.97	538463	382056.7	32°03'01.1" 104°12'32.0"	1.5	-1.5	0
+	3915.4	3.019	344.277	3865.83	-473.21	472.04	-144.75	538461.3	382063	32°03'01.2" 104°12'32.0"	1.5	-1.5	0
+	4015.4	1.519	344.277	3965.75	-477.03	475.85	-145.82	538460.2	382066.8	32°03'01.2" 104°12'32.0"	1.5	-1.5	0
+	4115.4	0.019	344.277	4065.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	1.5	-1.5	0
	4116.66	0	210	4067	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	1.5	-1.5	1246.33 End Drop
+	4215.4	0	210	4165.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4315.4	0	210	4265.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4415.4	0	210	4365.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4515.4	0	210	4465.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4615.4	0	210	4565.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4715.4	0	210	4665.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4815.4	0	210	4765.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	4915.4	0	210	4865.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5015.4	0	210	4965.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5115.4	0	210	5065.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5215.4	0	210	5165.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5315.4	0	210	5265.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5415.4	0	210	5365.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5515.4	0	210	5465.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5615.4	0	210	5565.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5715.4	0	210	5665.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5815.4	0	210	5765.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	5915.4	0	210	5865.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6015.4	0	210	5965.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6115.4	0	210	6065.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6215.4	0	210	6165.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6315.4	0	210	6265.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6415.4	0	210	6365.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6515.4	0	210	6465.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6615.4	0	210	6565.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6715.4	0	210	6665.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6815.4	0	210	6765.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	6915.4	0	210	6865.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7015.4	0	210	6965.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7115.4	0	210	7065.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7215.4	0	210	7165.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7315.4	0	210	7265.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7415.4	0	210	7365.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7515.4	0	210	7465.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7615.4	0	210	7565.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7715.4	0	210	7665.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7815.4	0	210	7765.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	7915.4	0	210	7865.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8015.4	0	210	7965.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8115.4	0	210	8065.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8215.4	0	210	8165.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8315.4	0	210	8265.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8415.4	0	210	8365.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8515.4	0	210	8465.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8615.4	0	210	8565.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8715.4	0	210	8665.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8815.4	0	210	8765.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	8915.4	0	210	8865.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	9015.4	0	210	8965.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
+	9115.4	0	210	9065.74	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0
	9164.11	0	210	9114.45	-478.32	477.14	-146.19	538459.8	382068.1	32°03'01.2" 104°12'32.0"	0	0	0 Curve KOP
+	9215.4	5.129	210	9165.67	-476.35	475.15	-147.34	538458.7	382066.1	32°03'01.2" 104°12'32.0"	10	10	-292.44
+	9315.4	15.129	210	9263.99	-461.21	459.94	-156.12	538449.9	382050.9	32°03'01.1" 104°12'32.0"	10	10	0
+	9415.4	25.129	210	9357.76	-431.58	430.18	-173.3	538432.7	382021.1	32°03'00.8" 104°12'32.0"	10	10	0
+	9515.4	35.129	210	9444.14	-388.38	386.76	-198.37	538407.7	381977.7	32°03'00.4" 104°12'32.0"	10	10	0
	9564.11	40	210	9482.74	-362.79	361.05	-213.21	538392.8	381952	32°03'00.1" 104°12'32.0"	10	10	0 Cont. Build
+	9615.4	44.156	205.509	9520.81	-332.5	330.63	-229.16	538376.9	381921.6	32°02'59.8" 104°12'34.0"	10	8.1	-8.76

+	9715.4	52.658	198.445	9587.18	-263.41	261.31	-256.81	538349.2	381852.3	32°02'59.1" 104°12'34.4"	10	8.5	-7.06
+	9815.4	61.492	192.851	9641.51	-182.84	180.56	-279.21	538326.8	381771.5	32°02'58.3" 104°12'34.4"	10	8.83	-5.59
+	9915.4	70.52	188.135	9682.15	-93.25	90.83	-295.7	538310.3	381681.8	32°02'57.4" 104°12'34.4"	10	9.03	-4.72
+	10015.4	79.657	183.924	9707.86	2.64	-5.15	-305.76	538300.3	381585.9	32°02'56.5" 104°12'34.4"	10	9.14	-4.21
+	10115.4	88.846	179.953	9717.87	101.92	-104.46	-309.09	538296.9	381486.6	32°02'55.5" 104°12'35.0"	10	9.19	-3.97
	10127.95	90	179.461	9718	114.47	-117.01	-309.03	538297	381474	32°02'55.4" 104°12'35.0"	10	9.2	-3.92 End Build/
+	10215.4	90	179.461	9718	201.92	-204.46	-308.21	538297.8	381386.6	32°02'54.5" 104°12'35.0"	0	0	0
+	10315.4	90	179.461	9718	301.92	-304.45	-307.27	538298.8	381286.6	32°02'53.5" 104°12'35.0"	0	0	0
+	10415.4	90	179.461	9718	401.92	-404.45	-306.32	538299.7	381186.6	32°02'52.5" 104°12'34.4"	0	0	0
+	10515.4	90	179.461	9718	501.92	-504.44	-305.38	538300.6	381086.6	32°02'51.5" 104°12'34.4"	0	0	0
+	10615.4	90	179.461	9718	601.92	-604.44	-304.44	538301.6	380986.6	32°02'50.5" 104°12'34.4"	0	0	0
+	10715.4	90	179.461	9718	701.92	-704.44	-303.5	538302.5	380886.6	32°02'49.6" 104°12'34.4"	0	0	0
+	10815.4	90	179.461	9718	801.92	-804.43	-302.56	538303.5	380786.6	32°02'48.6" 104°12'34.4"	0	0	0
+	10915.4	90	179.461	9718	901.92	-904.43	-301.62	538304.4	380686.7	32°02'47.6" 104°12'34.4"	0	0	0
+	11015.4	90	179.461	9718	1001.92	-1004.42	-300.68	538305.4	380586.7	32°02'46.6" 104°12'34.4"	0	0	0
+	11115.4	90	179.461	9718	1101.92	-1104.42	-299.74	538306.3	380486.7	32°02'45.6" 104°12'34.4"	0	0	0
+	11215.4	90	179.461	9718	1201.92	-1204.41	-298.8	538307.2	380386.7	32°02'44.6" 104°12'34.4"	0	0	0
+	11315.4	90	179.461	9718	1301.92	-1304.41	-297.86	538308.2	380286.7	32°02'43.6" 104°12'34.4"	0	0	0
+	11415.4	90	179.461	9718	1401.92	-1404.41	-296.92	538309.1	380186.7	32°02'42.6" 104°12'34.4"	0	0	0
+	11515.4	90	179.461	9718	1501.92	-1504.4	-295.98	538310.1	380086.7	32°02'41.6" 104°12'34.4"	0	0	0
+	11615.4	90	179.461	9718	1601.92	-1604.4	-295.04	538311	379986.8	32°02'40.6" 104°12'34.4"	0	0	0
+	11715.4	90	179.461	9718	1701.92	-1704.39	-294.1	538311.9	379886.8	32°02'39.7" 104°12'34.4"	0	0	0
+	11815.4	90	179.461	9718	1801.92	-1804.39	-293.16	538312.9	379786.8	32°02'38.7" 104°12'34.4"	0	0	0
+	11915.4	90	179.461	9718	1901.92	-1904.38	-292.22	538313.8	379686.8	32°02'37.7" 104°12'34.4"	0	0	0
+	12015.4	90	179.461	9718	2001.92	-2004.38	-291.28	538314.8	379586.8	32°02'36.7" 104°12'34.4"	0	0	0
+	12115.4	90	179.461	9718	2101.92	-2104.37	-290.34	538315.7	379486.8	32°02'35.7" 104°12'34.4"	0	0	0
+	12215.4	90	179.461	9718	2201.92	-2204.37	-289.4	538316.6	379386.8	32°02'34.7" 104°12'34.4"	0	0	0
+	12315.4	90	179.461	9718	2301.92	-2304.37	-288.45	538317.6	379286.8	32°02'33.7" 104°12'34.4"	0	0	0
+	12415.4	90	179.461	9718	2401.92	-2404.36	-287.51	538318.5	379186.9	32°02'32.7" 104°12'34.4"	0	0	0
+	12515.4	90	179.461	9718	2501.92	-2504.36	-286.57	538319.5	379086.9	32°02'31.7" 104°12'34.4"	0	0	0
+	12615.4	90	179.461	9718	2601.92	-2604.35	-285.63	538320.4	378986.9	32°02'30.8" 104°12'34.4"	0	0	0
+	12715.4	90	179.461	9718	2701.92	-2704.35	-284.69	538321.3	378886.9	32°02'29.8" 104°12'34.4"	0	0	0
+	12815.4	90	179.461	9718	2801.92	-2804.34	-283.75	538322.3	378786.9	32°02'28.8" 104°12'34.4"	0	0	0
+	12915.4	90	179.461	9718	2901.92	-2904.34	-282.81	538323.2	378686.9	32°02'27.8" 104°12'34.4"	0	0	0
+	13015.4	90	179.461	9718	3001.92	-3004.33	-281.87	538324.2	378586.9	32°02'26.8" 104°12'34.4"	0	0	0
+	13115.4	90	179.461	9718	3101.92	-3104.33	-280.93	538325.1	378487	32°02'25.8" 104°12'34.4"	0	0	0
+	13215.4	90	179.461	9718	3201.92	-3204.33	-279.99	538326	378387	32°02'24.8" 104°12'34.4"	0	0	0
+	13315.4	90	179.461	9718	3301.92	-3304.32	-279.05	538327	378287	32°02'23.8" 104°12'34.4"	0	0	0
+	13415.4	90	179.461	9718	3401.92	-3404.32	-278.11	538327.9	378187	32°02'22.8" 104°12'34.4"	0	0	0
+	13515.4	90	179.461	9718	3501.92	-3504.31	-277.17	538328.9	378087	32°02'21.8" 104°12'34.4"	0	0	0
+	13615.4	90	179.461	9718	3601.92	-3604.31	-276.23	538329.8	377987	32°02'20.9" 104°12'34.4"	0	0	0
+	13715.4	90	179.461	9718	3701.92	-3704.3	-275.29	538330.7	377887	32°02'19.9" 104°12'34.4"	0	0	0
+	13815.4	90	179.461	9718	3801.92	-3804.3	-274.35	538331.7	377787.1	32°02'18.9" 104°12'34.4"	0	0	0
+	13915.4	90	179.461	9718	3901.92	-3904.29	-273.41	538332.6	377687.1	32°02'17.9" 104°12'34.4"	0	0	0
+	14015.4	90	179.461	9718	4001.92	-4004.29	-272.47	538333.6	377587.1	32°02'16.9" 104°12'34.4"	0	0	0
+	14115.4	90	179.461	9718	4101.92	-4104.29	-271.53	538334.5	377487.1	32°02'15.9" 104°12'34.4"	0	0	0
+	14215.4	90	179.461	9718	4201.92	-4204.28	-270.58	538335.4	377387.1	32°02'14.9" 104°12'34.4"	0	0	0
+	14315.4	90	179.461	9718	4301.92	-4304.28	-269.64	538336.4	377287.1	32°02'13.9" 104°12'34.4"	0	0	0
+	14415.4	90	179.461	9718	4401.92	-4404.27	-268.7	538337.3	377187.1	32°02'12.9" 104°12'34.4"	0	0	0
+	14515.4	90	179.461	9718	4501.92	-4504.27	-267.76	538338.3	377087.1	32°02'12.0" 104°12'34.4"	0	0	0
+	14615.4	90	179.461	9718	4601.92	-4604.26	-266.82	538339.2	376987.2	32°02'11.0" 104°12'34.4"	0	0	0
+	14715.4	90	179.461	9718	4701.92	-4704.26	-265.88	538340.1	376887.2	32°02'10.0" 104°12'34.4"	0	0	0
+	14815.4	90	179.461	9718	4801.92	-4804.25	-264.94	538341.1	376787.2	32°02'09.0" 104°12'34.4"	0	0	0
+	14915.4	90	179.461	9718	4901.92	-4904.25	-264	538342	376687.2	32°02'08.0" 104°12'34.4"	0	0	0
+	15015.4	90	179.461	9718	5001.92	-5004.25	-263.06	538343	376587.2	32°02'07.0" 104°12'34.4"	0	0	0
+	15115.4	90	179.461	9718	5101.92	-5104.24	-262.12	538343.9	376487.2	32°02'06.0" 104°12'34.4"	0	0	0
	15125.63	90	179.461	9718	5112.14	-5114.47	-262.02	538344	376477	32°02'05.9" 104°12'34.4"	0	0	0 Start Turn
	15132.59	90	179.6	9718	5119.11	-5121.43	-261.97	538344.1	376470	32°02'05.8" 104°12'34.4"	2	0	2 End Turn
+	15215.4	90	179.6	9718	5201.92	-5204.24	-261.39	538344.6	376387.2	32°02'05.0" 104°12'34.4"	0	0	0
+	15315.4	90	179.6	9718	5301.92	-5304.24	-260.69	538345.3	376287.3	32°02'04.0" 104°12'34.4"	0	0	0
+	15415.4	90	179.6	9718	5401.92	-5404.23	-259.99	538346	376187.3	32°02'03.0" 104°12'34.4"	0	0	0
+	15515.4	90	179.6	9718	5501.92	-5504.23	-259.3	538346.7	376087.3	32°02'02.1" 104°12'34.4"	0	0	0
+	15615.4	90	179.6	9718	5601.92	-5604.23	-258.6	538347.4	375987.3	32°02'01.1" 104°12'34.4"	0	0	0
+	15715.4	90	179.6	9718	5701.92	-5704.23	-257.9	538348.1	375887.3	32°02'00.1" 104°12'34.4"	0	0	0
+	15815.4	90	179.6	9718	5801.92	-5804.22	-257.2	538348.8	375787.3	32°01'59.1" 104°12'34.4"	0	0	0
+	15915.4	90	179.6	9718	5901.92	-5904.22	-256.51	538349.5	375687.3	32°01'58.1" 104°12'34.4"	0	0	0
+	16015.4	90	179.6	9718	6001.92	-6004.22	-255.81	538350.2	375587.3	32°01'57.1" 104°12'34.4"	0	0	0
+	16115.4	90	179.6	9718	6101.92	-6104.22	-255.11	538350.9	375487.3	32°01'56.1" 104°12'34.4"	0	0	0
+	16215.4	90	179.6	9718	6201.92	-6204.21	-254.41	538351.6	375387.4	32°01'55.1" 104°12'34.4"	0	0	0
+	16315.4	90	179.6	9718	6301.92	-6304.21	-253.72	538352.3	375287.4	32°01'54.1" 104°12'34.4"	0	0	0
+	16415.4	90	179.6	9718	6401.92	-6404.21	-253.02	538353	375187.4	32°01'53.1" 104°12'34.4"	0	0	0
+	16515.4	90	179.6	9718	6501.92	-6504.21	-252.32	538353.7	375087.4	32°01'52.1" 104°12'34.4"	0	0	0
+	16615.4	90	179.6	9718	6601.92	-6604.2	-251.62	538354.4	374987.4	32°01'51.2" 104°12'34.4"	0	0	0
+	16715.4	90	179.6	9718	6701.92	-6704.2	-250.93	538355.1	374887.4	32°01'50.2" 104°12'34.4"	0	0	0
+	16815.4	90	179.6	9718	6801.92	-6804.2	-250.23	538355.8	374787.4	32°01'49.2" 104°12'34.4"	0	0	0
+	16915.4	90	179.6	9718	6901.92	-6904.2	-249.53	538356.5	374687.4	32°01'48.2" 104°12'34.4"	0	0	0

†	17015.4	90	179.6	9718	7001.92	-7004.2	-248.83	538357.2	374587.4	32°01'47.2" 104°12'34.4"	0	0	0
†	17115.4	90	179.6	9718	7101.92	-7104.19	-248.14	538357.9	374487.5	32°01'46.2" 104°12'34.4"	0	0	0
†	17215.4	90	179.6	9718	7201.92	-7204.19	-247.44	538358.6	374387.5	32°01'45.2" 104°12'34.4"	0	0	0
†	17315.4	90	179.6	9718	7301.92	-7304.19	-246.74	538359.3	374287.5	32°01'44.2" 104°12'34.4"	0	0	0
†	17415.4	90	179.6	9718	7401.92	-7404.19	-246.04	538360	374187.5	32°01'43.3" 104°12'34.4"	0	0	0
†	17515.4	90	179.6	9718	7501.92	-7504.18	-245.35	538360.7	374087.5	32°01'42.3" 104°12'34.4"	0	0	0
†	17615.4	90	179.6	9718	7601.92	-7604.18	-244.65	538361.4	373987.5	32°01'41.3" 104°12'34.4"	0	0	0
†	17715.4	90	179.6	9718	7701.92	-7704.18	-243.95	538362.1	373887.5	32°01'40.3" 104°12'34.4"	0	0	0
†	17815.4	90	179.6	9718	7801.92	-7804.18	-243.25	538362.8	373787.5	32°01'39.3" 104°12'34.4"	0	0	0
†	17915.4	90	179.6	9718	7901.92	-7904.17	-242.56	538363.5	373687.6	32°01'38.3" 104°12'34.4"	0	0	0
†	18015.4	90	179.6	9718	8001.92	-8004.17	-241.86	538364.2	373587.6	32°01'37.3" 104°12'34.4"	0	0	0
†	18115.4	90	179.6	9718	8101.92	-8104.17	-241.16	538364.9	373487.6	32°01'36.3" 104°12'34.4"	0	0	0
†	18215.4	90	179.6	9718	8201.92	-8204.17	-240.46	538365.6	373387.6	32°01'35.3" 104°12'34.4"	0	0	0
†	18315.4	90	179.6	9718	8301.92	-8304.16	-239.77	538366.3	373287.6	32°01'34.3" 104°12'34.4"	0	0	0
†	18415.4	90	179.6	9718	8401.92	-8404.16	-239.07	538367	373187.6	32°01'33.4" 104°12'34.4"	0	0	0
†	18515.4	90	179.6	9718	8501.92	-8504.16	-238.37	538367.7	373087.6	32°01'32.4" 104°12'34.4"	0	0	0
†	18615.4	90	179.6	9718	8601.92	-8604.16	-237.67	538368.4	372987.6	32°01'31.4" 104°12'34.4"	0	0	0
†	18715.4	90	179.6	9718	8701.92	-8704.15	-236.98	538369.1	372887.6	32°01'30.4" 104°12'34.4"	0	0	0
†	18815.4	90	179.6	9718	8801.92	-8804.15	-236.28	538369.7	372787.7	32°01'29.4" 104°12'34.4"	0	0	0
†	18915.4	90	179.6	9718	8901.92	-8904.15	-235.58	538370.4	372687.7	32°01'28.4" 104°12'34.4"	0	0	0
†	19015.4	90	179.6	9718	9001.92	-9004.15	-234.88	538371.1	372587.7	32°01'27.4" 104°12'34.4"	0	0	0
†	19115.4	90	179.6	9718	9101.92	-9104.14	-234.19	538371.8	372487.7	32°01'26.4" 104°12'34.4"	0	0	0
†	19215.4	90	179.6	9718	9201.92	-9204.14	-233.49	538372.5	372387.7	32°01'25.4" 104°12'34.4"	0	0	0
†	19315.4	90	179.6	9718	9301.92	-9304.14	-232.79	538373.2	372287.7	32°01'24.5" 104°12'34.4"	0	0	0
†	19415.4	90	179.6	9718	9401.92	-9404.14	-232.09	538373.9	372187.7	32°01'23.5" 104°12'34.4"	0	0	0
†	19515.4	90	179.6	9718	9501.92	-9504.13	-231.39	538374.6	372087.7	32°01'22.5" 104°12'34.4"	0	0	0
†	19615.4	90	179.6	9718	9601.92	-9604.13	-230.7	538375.3	371987.7	32°01'21.5" 104°12'34.4"	0	0	0
†	19715.4	90	179.6	9718	9701.92	-9704.13	-230	538376	371887.8	32°01'20.5" 104°12'34.4"	0	0	0
†	19815.4	90	179.6	9718	9801.92	-9804.13	-229.3	538376.7	371787.8	32°01'19.5" 104°12'34.4"	0	0	0
†	19915.4	90	179.6	9718	9901.92	-9904.12	-228.6	538377.4	371687.8	32°01'18.5" 104°12'34.4"	0	0	0
†	20015.4	90	179.6	9718	10001.92	-10004.12	-227.91	538378.1	371587.8	32°01'17.5" 104°12'34.4"	0	0	0
†	20115.4	90	179.6	9718	10101.92	-10104.12	-227.21	538378.8	371487.8	32°01'16.5" 104°12'34.4"	0	0	0
†	20215.4	90	179.6	9718	10201.92	-10204.12	-226.51	538379.5	371387.8	32°01'15.5" 104°12'34.4"	0	0	0
†	20315.4	90	179.6	9718	10301.92	-10304.11	-225.81	538380.2	371287.8	32°01'14.6" 104°12'34.4"	0	0	0
†	20415.4	90	179.6	9718	10401.92	-10404.11	-225.12	538380.9	371187.8	32°01'13.6" 104°12'34.4"	0	0	0
	20429.24	90	179.6	9718	10415.75	-10417.95	-225.02	538381	371174	32°01'13.4" 104°12'34.4"	0	0	0 PBHL (25')

HOLE AND CASING SECTIONS Ref Wellbore: HH SO 17 20 Fed 002 No. 2H PWB Ref Wellpath: HH SO 17 20 Fed 002 No. 2H Rev-A.0

String/Diary	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W
	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]
13.375in C	28	444	416	28	443.79	0	0	-10.52	6.53
9.625in Cas	28	8298.66	8270.66	28	8249	0	0	477.14	-146.19
5.5in Casin	28	20429.24	20401.24	28	9718	0	0	-10417.95	-225.02

TARGETS

Name	MD	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape	Comment
	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]				
(1) HH SO 1	10127.95	9718	-117.01	-309.03	538297	381474	32°02'55.4" 104°12'35.1"		point	
HH SO 17 20 Fed 002		9718	-10112.92	-227.02	538379	371479	32°01'16.4" 104°12'34.1"		point	
(2) HH SO 1	15125.63	9718	-5114.47	-262.02	538344	376477	32°02'05.9" 104°12'34.1"		point	
(3) HH SO 1	20429.24	9718	-10417.95	-225.02	538381	371174	32°01'13.4" 104°12'34.1"		point	

SURVEY PROGRAM Ref Wellbore: HH SO 17 20 Fed 002 No. 2H PWB Ref Wellpath: HH SO 17 20 Fed 002 No. 2H Rev-A.0

Start MD End MD Pos Unc M Log Name/ Wellbore

	[ft]	[ft]			
28	415.4		OWSG MW	MWD Surv	HH SO 17 20 Fed 002 No. 2H AWB
415.4	8300		OWSG MW	rev2 + Hf	HH SO 17 20 Fed 002 No. 2H PWB
8300	21000		OWSG MW	rev2 + Hf	HH SO 17 20 Fed 002 No. 2H PWB

COMMENTS