



April 19, 2018

Top Operating Company  
3609 S. Wadsworth Blvd., Ste. 340  
Denver, CO 80235

RE: COGCC Rule 317.s: Statewide Fracture Stimulation Setback  
Rinn Valley West N17-20-11C  
SESE, Section 18, Township 2 North, Range 68 West  
Weld County, Colorado

Dear Operator,

Extraction Oil & Gas, Inc. (Extraction) intends to apply to the Colorado Oil and Gas Conversation Commission ("COGCC") to drill and operate the above referenced well. Pursuant to the following COGCC Rule 317.s. Statewide Fracture Stimulation Setback:

- (1) No portion of a proposed wellbore's treated interval shall be located within 150 feet of an existing (producing, shut-in, or temporarily abandoned) or permitted oil and gas wellbore's treated interval belonging to another operator without the signed written consent of the operator of the encroached upon wellbore. The signed written consent shall be attached to the Application for Permit-to-Drill, Form 2 for the proposed wellbore.*
- (2) The distance between wellbores measurement shall be based upon the directional survey for drilled wellbores and the deviated drilling plan for permitted wellbores, or as otherwise reflected in the COGCC well records. The distance shall be measured from the perforation or mechanical isolation device.*

As currently planned, the proposed treated interval of the aforementioned subject horizontal well will lie within 150 feet of the treated interval of the following well belonging to Top Operating:

**Sherwood 1, API #05-123-23886, located in Lot 1 of Section 18-T2N-R68W, Closest distance: 81.76'**  
**Sherwood 2, API #05-123-23908, located in Lot 1 of Section 18-T2N-R68W, Closest distance: 72.98'**

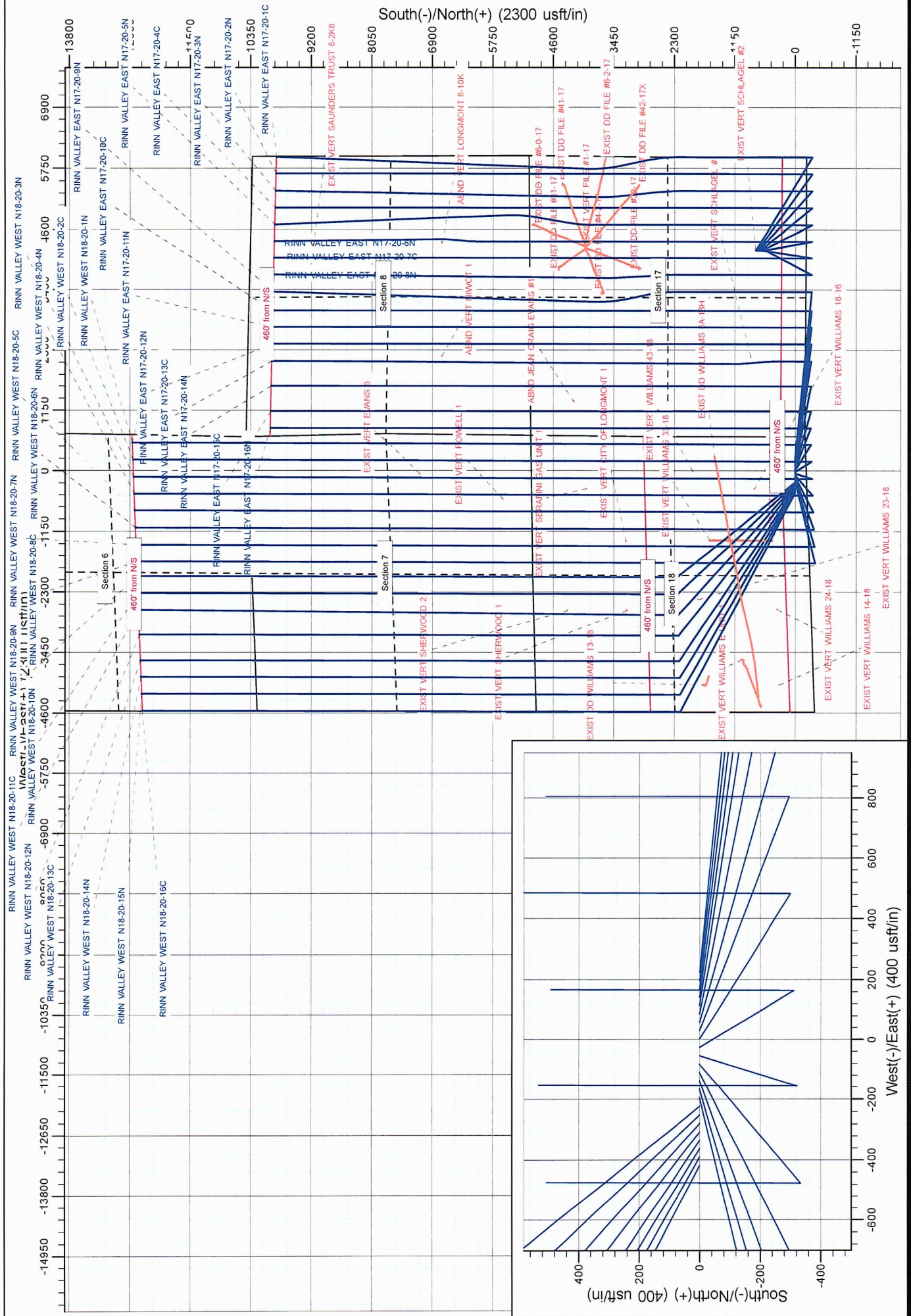
Please see enclosed the Well Location Plat and Anti-Collision Report detailing the planned wellbore. Should you find the stimulation of the proposed wellbore acceptable, please indicate so by signing the below section and returning the signed letter either via email to [kwelch@extractionog.com](mailto:kwelch@extractionog.com) or by mail. Please contact the undersigned at 720-354-4607 with any questions.

Sincerely,

Kelsi Welch  
Regulatory Analyst  
Extraction Oil & Gas, Inc.

I, Murray J. Herring, officer, agent, or employee of TOP Operating Co. operator of the affected well, with full power to execute the following, do hereby approve of the **Rinn Valley West N17-20-11C** well as listed above in **Sec. 18-T2N-R68W** and grant consent pursuant to COGCC Rule 317.s., granting that this well may drilled as planned.

Signed MJ Herring this 25 day of April, 2018





# Anticollision Report

<b>Company:</b>	EXTRACTION OIL & GAS	<b>Local Co-ordinate Reference:</b>	Well RINN VALLEY WEST N18-20-11C
<b>Project:</b>	Weld County	<b>TVD Reference:</b>	KB 25' @ 4968.00usft
<b>Reference Site:</b>	Sec 18-T2N-R68W	<b>MD Reference:</b>	KB 25' @ 4968.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	RINN VALLEY WEST N18-20-11C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDT_32Bit_ODBC
<b>Reference Design:</b>	PROPOSAL 1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PROPOSAL 1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD + Stations Interval 100.00usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 9,999.98 usft	<b>Error Surface:</b>	Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	3/20/2018		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	18,522.78	PROPOSAL 1 (ORIGINAL WELLBORE)	MWD OWSG	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec 18-T2N-R68W						
EXIST DD WILLIAMS 13-18 - Wellbore #1 - Wellbore #1	7,972.74	7,028.60	1,425.60	1,336.78	16.050	CC, ES
EXIST DD WILLIAMS 13-18 - Wellbore #1 - Wellbore #1	8,400.00	7,380.54	1,492.57	1,397.42	15.686	SF
EXIST DD WILLIAMS 34-18 - Wellbore #1 - Design #1	4,347.27	3,847.36	319.73	269.24	6.333	CC, ES
EXIST DD WILLIAMS 34-18 - Wellbore #1 - Design #1	4,400.00	3,886.48	321.69	270.87	6.329	SF
EXIST DD WILLIAMS 3A-18H - Wellbore #1 - Wellbore #	8,039.25	9,232.16	1,267.49	1,162.39	12.059	CC, ES
EXIST DD WILLIAMS 3A-18H - Wellbore #1 - Wellbore #	8,100.00	9,233.36	1,272.08	1,166.48	12.046	SF
EXIST VERT CITY OF LONGMONT 1 - Wellbore #1 - De	9,200.00	7,467.99	1,405.55	1,188.39	6.472	SF
EXIST VERT CITY OF LONGMONT 1 - Wellbore #1 - De	9,268.19	7,467.99	1,403.89	1,187.64	6.492	CC, ES
EXIST VERT SERAFINI GAS UNIT 1 - Wellbore #1 - De	10,000.00	7,459.96	2,389.31	2,161.58	10.492	SF
EXIST VERT SERAFINI GAS UNIT 1 - Wellbore #1 - De	10,030.99	7,459.96	2,389.11	2,161.44	10.494	CC, ES
EXIST VERT SHERWOOD 1 - Wellbore #1 - Design #1	9,200.00	7,472.99	89.49	-138.52	0.392	Level 1, ES
EXIST VERT SHERWOOD 1 - Wellbore #1 - Design #1	9,236.39	7,472.99	81.76	-134.13	0.379	Level 1, CC, SF
EXIST VERT SHERWOOD 2 - Wellbore #1 - Design #1	10,365.63	7,464.95	72.98	-160.04	0.313	Level 1, CC, ES, SF
EXIST VERT WILLIAMS 14-18 - Wellbore #1 - Design #1	6,584.49	5,703.68	2,318.37	2,140.03	13.000	CC
EXIST VERT WILLIAMS 14-18 - Wellbore #1 - Design #1	7,950.00	7,015.62	2,337.72	2,126.92	11.090	ES
EXIST VERT WILLIAMS 14-18 - Wellbore #1 - Design #1	8,100.00	7,163.32	2,357.27	2,143.18	11.011	SF
EXIST VERT WILLIAMS 18-16 - Wellbore #1 - Design #1	2,438.68	2,276.02	531.29	472.51	9.039	CC
EXIST VERT WILLIAMS 18-16 - Wellbore #1 - Design #1	2,500.00	2,325.01	532.57	472.13	8.812	ES
EXIST VERT WILLIAMS 18-16 - Wellbore #1 - Design #1	2,700.00	2,484.75	554.06	488.51	8.452	SF
EXIST VERT WILLIAMS 23-18 - Wellbore #1 - Design #1	6,217.55	5,303.96	80.41	-86.12	0.483	Level 1, CC, ES, SF
EXIST VERT WILLIAMS 24-18 - Wellbore #1 - Design #1	4,772.87	4,202.37	1,330.42	1,204.19	10.539	CC
EXIST VERT WILLIAMS 24-18 - Wellbore #1 - Design #1	4,900.00	4,303.91	1,332.62	1,202.78	10.264	ES
EXIST VERT WILLIAMS 24-18 - Wellbore #1 - Design #1	5,600.00	4,863.01	1,420.46	1,273.09	9.639	SF
EXIST VERT WILLIAMS 33-18 - Wellbore #1 - Design #1	4,579.39	4,007.16	516.23	396.36	4.307	CC
EXIST VERT WILLIAMS 33-18 - Wellbore #1 - Design #1	4,600.00	4,009.30	516.38	396.22	4.298	ES
EXIST VERT WILLIAMS 33-18 - Wellbore #1 - Design #1	4,700.00	4,089.17	521.31	398.64	4.250	SF
EXIST VERT WILLIAMS 43-18 - Wellbore #1 - Design #1	3,325.94	2,980.70	1,621.60	1,538.03	19.403	CC
EXIST VERT WILLIAMS 43-18 - Wellbore #1 - Design #1	3,500.00	3,119.72	1,624.98	1,536.51	18.368	ES
EXIST VERT WILLIAMS 43-18 - Wellbore #1 - Design #1	8,500.00	7,407.86	2,783.36	2,586.25	14.121	SF
EXIST VERT WILLIAMS E UNIT 1 - Wellbore #1 - Desig	6,878.55	5,778.95	1,463.60	1,281.36	8.031	CC
EXIST VERT WILLIAMS E UNIT 1 - Wellbore #1 - Desig	7,950.00	6,828.62	1,475.02	1,267.92	7.122	ES
EXIST VERT WILLIAMS E UNIT 1 - Wellbore #1 - Desig	8,050.00	6,927.84	1,484.46	1,275.18	7.093	SF
RINN VALLEY EAST N17-20-10C - ORIGINAL WELLBO	200.00	194.00	475.90	474.93	493.523	CC, ES
RINN VALLEY EAST N17-20-10C - ORIGINAL WELLBO	16,700.00	18,190.90	5,759.83	5,392.50	15.680	SF
RINN VALLEY EAST N17-20-11N - ORIGINAL WELLBO	300.00	294.00	447.94	446.26	266.434	CC, ES
RINN VALLEY EAST N17-20-11N - ORIGINAL WELLBO	16,600.00	17,849.98	5,435.53	5,070.12	14.875	SF
RINN VALLEY EAST N17-20-12N - ORIGINAL WELLBO	400.00	395.00	419.98	417.57	174.862	CC, ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



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<b>Reference Well:</b>	RINN VALLEY WEST N18-20-11C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDT_32Bit_ODBC
<b>Reference Design:</b>	PROPOSAL 1	<b>Offset TVD Reference:</b>	Offset Datum

## Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Sec 18-T2N-R68W						
RINN VALLEY EAST N17-20-12N - ORIGINAL WELLBO	16,500.00	17,737.60	5,107.34	4,743.46	14.036	SF
RINN VALLEY EAST N17-20-13C - ORIGINAL WELLBO	500.00	495.00	392.01	388.90	125.698	CC, ES
RINN VALLEY EAST N17-20-13C - ORIGINAL WELLBO	16,400.00	17,872.59	4,773.62	4,410.80	13.157	SF
RINN VALLEY EAST N17-20-14N - ORIGINAL WELLBO	600.00	596.00	364.05	360.21	94.825	CC, ES
RINN VALLEY EAST N17-20-14N - ORIGINAL WELLBO	16,300.00	17,504.45	4,294.41	3,933.59	11.902	SF
RINN VALLEY EAST N17-20-15C - ORIGINAL WELLBO	600.00	604.00	335.81	331.95	86.820	CC, ES
RINN VALLEY EAST N17-20-15C - ORIGINAL WELLBO	16,200.00	17,652.00	3,802.15	3,441.75	10.550	SF
RINN VALLEY EAST N17-20-16N - ORIGINAL WELLBO	600.00	603.00	307.85	303.99	79.665	CC, ES
RINN VALLEY EAST N17-20-16N - ORIGINAL WELLBO	16,200.00	17,363.45	3,490.73	3,131.77	9.725	SF
RINN VALLEY EAST N17-20-9N - ORIGINAL WELLBOR	100.00	93.00	503.86	503.60	1,942.073	CC, ES
RINN VALLEY EAST N17-20-9N - ORIGINAL WELLBOR	16,800.00	18,144.53	6,131.02	5,762.29	16.627	SF
RINN VALLEY WEST N18-20-10N - ORIGINAL WELLBO	600.00	601.00	27.96	24.10	7.249	CC, ES
RINN VALLEY WEST N18-20-10N - ORIGINAL WELLBO	18,523.39	18,176.13	405.66	43.66	1.121	Level 2, SF
RINN VALLEY WEST N18-20-12N - ORIGINAL WELLBO	500.00	500.00	27.96	24.82	8.914	CC, ES
RINN VALLEY WEST N18-20-12N - ORIGINAL WELLBO	18,523.39	18,474.27	541.65	127.32	1.307	Level 3, SF
RINN VALLEY WEST N18-20-13C - ORIGINAL WELLBO	400.00	400.00	55.92	53.50	23.111	CC, ES
RINN VALLEY WEST N18-20-13C - ORIGINAL WELLBO	18,523.39	18,868.13	960.73	511.56	2.139	SF
RINN VALLEY WEST N18-20-14N - ORIGINAL WELLBO	300.00	300.00	84.16	82.46	49.428	CC, ES
RINN VALLEY WEST N18-20-14N - ORIGINAL WELLBO	18,523.39	18,827.94	1,305.42	859.53	2.928	SF
RINN VALLEY WEST N18-20-15N - ORIGINAL WELLBO	200.00	201.00	112.12	111.13	113.327	CC, ES
RINN VALLEY WEST N18-20-15N - ORIGINAL WELLBO	18,523.39	18,973.96	1,621.05	1,173.13	3.619	SF
RINN VALLEY WEST N18-20-16C - ORIGINAL WELLBO	100.00	102.00	140.09	139.81	515.887	CC, ES
RINN VALLEY WEST N18-20-16C - ORIGINAL WELLBO	18,523.39	19,290.82	1,921.75	1,471.77	4.271	SF
RINN VALLEY WEST N18-20-1N - ORIGINAL WELLBOR	600.00	603.00	279.89	276.03	72.429	CC, ES
RINN VALLEY WEST N18-20-1N - ORIGINAL WELLBOR	18,523.39	19,842.68	3,172.34	2,727.35	7.129	SF
RINN VALLEY WEST N18-20-2C - ORIGINAL WELLBOR	600.00	602.00	251.93	248.07	65.254	CC, ES
RINN VALLEY WEST N18-20-2C - ORIGINAL WELLBOR	18,523.39	20,084.08	2,843.04	2,395.93	6.359	SF
RINN VALLEY WEST N18-20-3N - ORIGINAL WELLBOR	600.00	602.00	223.97	220.11	58.012	CC, ES
RINN VALLEY WEST N18-20-3N - ORIGINAL WELLBOR	18,523.39	19,844.76	2,535.06	2,090.19	5.698	SF
RINN VALLEY WEST N18-20-4N - ORIGINAL WELLBOR	600.00	601.00	196.01	192.15	50.817	CC, ES
RINN VALLEY WEST N18-20-4N - ORIGINAL WELLBOR	18,523.39	19,871.13	2,216.65	1,772.95	4.996	SF
RINN VALLEY WEST N18-20-5C - ORIGINAL WELLBOR	600.00	601.00	168.05	164.19	43.567	CC, ES
RINN VALLEY WEST N18-20-5C - ORIGINAL WELLBOR	18,523.39	20,161.47	1,881.77	1,434.96	4.212	SF
RINN VALLEY WEST N18-20-6N - ORIGINAL WELLBOR	600.00	602.00	140.09	136.22	36.285	CC, ES
RINN VALLEY WEST N18-20-6N - ORIGINAL WELLBOR	18,523.39	19,973.14	1,581.74	1,141.45	3.593	SF
RINN VALLEY WEST N18-20-7N - ORIGINAL WELLBOR	600.00	602.00	111.84	107.98	28.970	CC, ES
RINN VALLEY WEST N18-20-7N - ORIGINAL WELLBOR	18,523.39	20,047.64	1,266.62	829.69	2.899	SF
RINN VALLEY WEST N18-20-8C - ORIGINAL WELLBOR	600.00	603.00	83.88	80.02	21.707	CC, ES
RINN VALLEY WEST N18-20-8C - ORIGINAL WELLBOR	18,523.39	20,373.12	920.99	474.71	2.064	SF
RINN VALLEY WEST N18-20-9N - ORIGINAL WELLBOR	600.00	602.00	55.92	52.06	14.485	CC, ES
RINN VALLEY WEST N18-20-9N - ORIGINAL WELLBOR	18,523.39	18,077.64	686.57	271.01	1.652	SF
Sec 6-T2N-R68W						
ABND VERT MAYEDA 1 - Wellbore #1 - Design #1	16,914.33	4,333.00	3,185.08	3,098.29	36.696	CC, ES
ABND VERT MAYEDA 1 - Wellbore #1 - Design #1	18,500.00	4,333.00	3,557.97	3,438.58	29.800	SF
EXIST VERT MAYEDA, JOHN Y 2 - Wellbore #1 - Desig	16,975.25	7,500.00	193.73	-149.41	0.565	Level 1, CC, ES, SF
Sec 7-T2N-R68W						
EXIST VERT EVANS 6 - Wellbore #1 - Design #1	13,200.71	7,448.92	2,635.36	2,355.80	9.427	CC, ES, SF
EXIST VERT POWELL 1 - Wellbore #1 - Design #1	11,600.00	7,454.93	2,170.95	1,917.81	8.576	SF
EXIST VERT POWELL 1 - Wellbore #1 - Design #1	11,614.88	7,454.93	2,170.90	1,917.81	8.578	CC, ES

## SE1/4 SE1/4 SEC. 18, T2N, R68W, 6TH P.M.

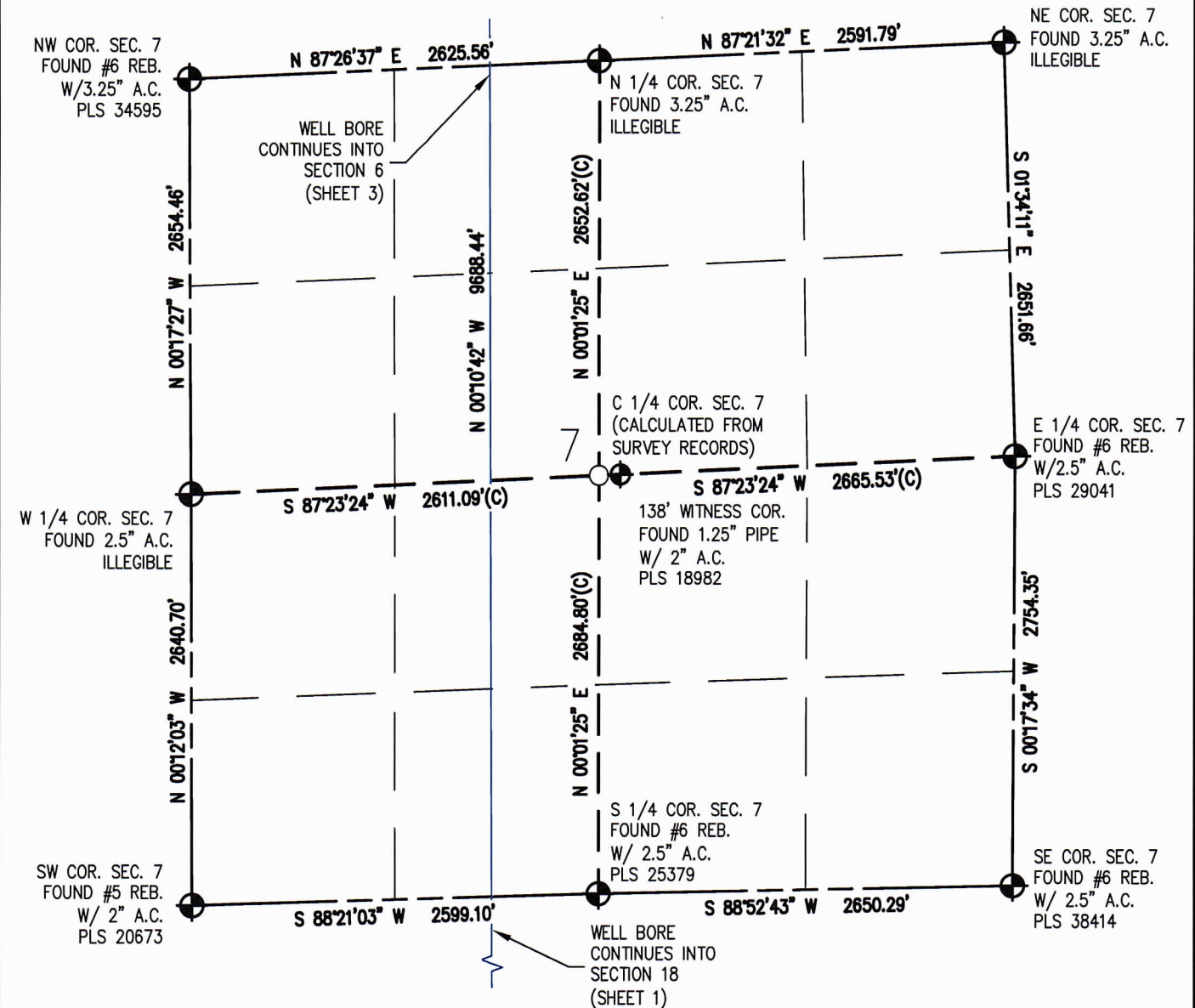


- 4007 S. LINCOLN AVENUE, SUITE 405 • LOVELAND, COLORADO 80537  
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# WELL LOCATION PLAT RINN VALLEY WEST N18-20-11C

SE1/4 SE1/4 SEC. 18, T2N, R68W, 6TH P.M.



## NOTES:

1. INDICATES SECTION CORNER
2. INDICATES CALCULATED CORNER
3. (C) INDICATES CALCULATED DIMENSION
4. ELEVATION BASED ON NAVD88 (GEOID12B)
5. BEARINGS DERIVED FROM COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE.
6. OPERATOR: TRAVIS WINNICKI
7. IMPROVEMENTS: SEE LOCATION DRAWING FOR ALL VISIBLE IMPROVEMENTS WITHIN 500' OF DISTURBED AREA.
8. WELL FOOTAGES ARE MEASURED AT RIGHT ANGLES TO THE SECTION LINES.

## SURFACE LOCATION

SEC. 18, T2N, R68W  
GROUND ELEVATION = 4942.3'  
PDOP = 1.2  
LATITUDE = 40.132044'  
LONGITUDE = -105.039576'

## ENTRY POINT LOCATION

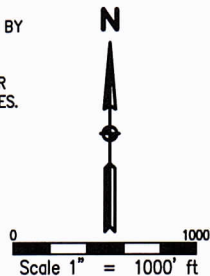
SEC. 18, T2N, R68W  
LATITUDE = 40.139719'  
LONGITUDE = -105.048501'  
2180' FNL, 1920' FWL

## BOTTOM HOLE LOCATION

SEC. 6, T2N, R68W  
LATITUDE = 40.166315'  
LONGITUDE = -105.048433'  
2180' FSL, 1920' FWL

I HEREBY CERTIFY THAT THIS WELL LOCATION CERTIFICATE WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, THAT THE FIELD WORK WAS COMPLETED ON 1/30/2018, THAT IT IS NOT A LAND SURVEY PLAT OR AN IMPROVEMENT SURVEY PLAT, AND THAT IT IS NOT TO BE RELIED UPON FOR ESTABLISHMENT OF FENCE, BUILDING, OR OTHER FUTURE IMPROVEMENT LINES.

AARON A. DEMO  
Professional Land Surveyor Registration No. 38285  
State of Colorado  
FOR AND ON BEHALF OF BASELINE ENGINEERING CORP.



## NEAREST CULTURAL ITEMS:

BUILDING: 1655' SW  
BUILDING UNIT: 1783' W  
HIGH OCCUPANCY BUILDING UNIT: 5280'+  
DESIGNATED OUTSIDE ACTIVITY AREA: 5280'+  
PUBLIC ROAD: WELD COUNTY ROAD 20 1/2 2395' N  
ABOVE GROUND UTILITY: 2169' SW  
RAILROAD: 5280'+  
PROPERTY LINE: 210' S  
SURFACE USE: CROP LAND.  
NEAREST EXISTING WELL: WILLIAMS 18-16 792' N



DRAWN BY	BGR	CHECKED BY	AAD
INITIAL SUBMITTAL	3/9/2018		
REVISED	N/A		
DRAWING SIZE	8.5" X 11"		
JOB NO.	EXT02N68W17-01		
SHEET	2 OF 3		

**BASELINE**  
Engineering · Planning · Surveying

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SE1/4 SE1/4 SEC. 18, T2N, R68W, 6TH P.M.

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