STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION

APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC TO APPROVE SALT WATER DISPOSAL WELL IN EDDY COUNTY, NEW MEXICO.

CASE NO. 20569

APPLICATION

NGL Water Solutions Permian, LLC ("NGL"), OGRID No. 372338, through its undersigned attorneys, hereby makes this application to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Eddy County, New Mexico. In support of this application, NGL states as follows:

- (1) NGL proposes to drill the Burton Flats SWD #1 well at a surface location 770 feet from the South line and 165 feet from the East line of Section 9, Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well.
- (2) NGL seeks authority to inject salt water into the Silurian-Devonian formation at a depth of 12,740' to 13,922'.
- (3) NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.
- (4) NGL anticipates using an average pressure of 1,911 psi for this well, and it requests that a maximum pressure of 2,548 psi be approved for the well.
 - (5) A proposed C-108 for the subject well is attached hereto in Attachment A.

(6) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

WHEREFORE, NGL requests that this application be set for hearing before an Examiner of the Oil Conservation Division on June 13, 2019; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS & SISK, P.A.

Deana Bennett

Post Office Box 2168

500 Fourth Street NW, Suite 1000

Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800 Attorneys for Applicant

CASE NO. 2061: Application of NGL Water Solutions Permian, LLC for approval of salt water disposal well in Eddy County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Burton Flats SWD #1 well at a surface location 770 feet from the South line and 165 feet from the East line of Section 9, Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well. NGL seeks authority to inject salt water into the Devonian/Montoya formation at a depth of 12,740' to 13,922'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said location is approximately 14.2 miles northeast of Carlsbad, New Mexico.

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
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SUBMIT ACCUR	ATE AND COMPLETE INF	ORMATION REQUI		TYPE OF APPLICATION
A. Location	ICATION: Check those to a Spacing Unit – Simult NSL NSP IPR	aneous Dedication		
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3) CERTIFICATIO administrative understand to	N: I hereby certify that e approval is accurate and no action will be tall are submitted to the Div	and complete to t ken on this applice	he best of my knowl	edge. I also
h	lote: Statement must be comple	ted by an individual with	managerial and/or superv	lsory capacity.
CHRIS WEYAND			5/6/2019 Date	
Print or Type Name		· · · · · · · · · · · · · · · · · · ·		
0,-1			512-600-1764 Phone Number	
Signature	41	EXHIBIT A	CHRIS@LONQUIST mail Address	СОМ

ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	Application qualifies for administrative approval?
II.	OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLC
	ADDRESS: 1509 W WALL ST // STE 306 // MIDLAND, TX 79701
	CONTACT PARTY: SARAH JORDAN PHONE: (432) 685-0005 x1989
111.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? Yes X No If yes, give the Division order number authorizing the project:
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted)
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Christopher B. Weyand
	SIGNATURE: DATE: DATE:
•	E-MAIL ADDRESS: chris@lonquist.com If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:
DIST	RIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLC

WELL NAME & NUMBER: BURTON FLATS SWD #1

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: <u>30.000"</u> Casing Size: <u>26.000"</u>

Cemented with: 536 sx. or ft

Top of Cement: <u>Surface</u> Method Determined: <u>Circulation</u>

1st Intermediate Casing

Hole Size: <u>24.000</u>" Casing Size: <u>20.000</u>"

Cemented with: 1,345 sx. or ft

Top of Cement: <u>Surface</u> Method Determined: <u>Circulation</u>

2st Intermediate Casing

Hole Size: <u>17.500</u>" Casing Size: <u>13.375</u>"

Cemented with: 2.043 sx. or ft³

Top of Cement: <u>Surface</u> Method Determined: <u>Circulation</u>

Production Casing

Hole Size: <u>12.250"</u>	Casing Size: <u>9.625"</u>
Cemented with: 2,561 sx.	<i>or</i> ft
Top of Cement: Surface	Method Determined: Circulation
	Production Liner
Hole Size: <u>8.500"</u>	Casing Size: 7.625"
Cemented with: 280 sx.	<i>or</i> ft
Top of Cement: 8,900'	Method Determined: Logged
Total Depth: 13,992'	
	Injection Interval
	12,740 feet to 13,922 feet
	(Open Hole)

INJECTION WELL DATA SHEET

	bing Size: 7", 26 lb/ft, P-110, TCPC from 0'- 8,800' and 5.500", 17 lb/ft, P-110 TCPC from 8,800' - 12,680' ing Material: Duoline						
Ту	pe of Packer: 7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim						
Pac	cker Setting Depth: 12,680'						
Oth	ner Type of Tubing/Casing Seal (if applicable):						
	Additional Data						
1.	Is this a new well drilled for injection?XYesNo						
	If no, for what purpose was the well originally drilled? N/A						
2.	Name of the Injection Formation: <u>Devonian, Silurian, Fusselman and Montoya (Top 100')</u>						
3.	Name of Field or Pool (if applicable): <u>SWD; Devonian-Silurian</u>						
4.	. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No, new drill.						
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Yates - Seven Rivers: 1,184' Delaware: 3,216' Bone Spring: 5,885' Wolfcamp: 9,244' Strawn: 10,419 Atoka: 10,817' Morrow: 11,319'						

NGL	Burton Flats SWD Eddy County NM		Location - Sec 9, Twp Drilling and Complete Co	-	TD	13,922	Directions to Site - From Carlsbad travel NE 14.2 m Hwy 62. Turn N on Burton Flats Road and travel 6m location. Lat/Long -32.582862, -104.071996	
Energy Purplies C	Vertical Injection - I	Devonian, Silurian, Fusselman	Draining and Complete Co	36 - 30.73141141	GL	. 3,288	location. Lat/Long -32.582862, -104.0/1996	
Geologic Tops (MI	oft)	Section Objectives	Drilling Problems	Drilling Fluid	Logging	Casing	Cement	Injection Strin
Rustler Surface TD	224 350	Surface - Isolate Groundwater from salt. Drill 350' of 30" hole, set 26" casing	Losses, Hole Cleaning Wellbore stability in the Red Beds	Spud Mud MW< 9.0	No Logs, MWD	350' of 26" casing, 202 ppf, X42	536 sx of Halcem 14.8ppg 3hr TT 75% Excess 1000psi CSD after 10hrs	
Salado 1st Int TD	1170	1st Intermediate - Isolate Salt and from Aquifiers Drill 890' of 24" Hole to 1170' Set and Cement 20" Casing	Anhydrite in the Rustler, Salt	Saturated Brine	No Logs. MWD. ML on site aby 1170'	1170' of 20", 106.5#, J55, BTC Centralizers - bottom 2 joints and every 3rd jt thereafter. NU Rotating Head and Diverter	Lead - 699 sx of HES Extenda Cem, 13.7ppg, 4.5hrs TT Tail - 646 sx of Halcem 3hr TT 75% Excess 1000psi CSD after 10hrs	8800' of 7"
7 Rivers (E Del) Capitan	1184 1464 1490	2nd Intermediate - Isolate the Capitan Reef Drill 1730' of 17" Hole 1170-2900' Set and Cerment	Possible Losses	Fresh water Gel Polymer	MWD GR, Triple Combo	5M A Section Wellhead. 2900' of 13-3/8" 68# HCL80 BTC Centralizers - bottom jt, every 3rd joint in open hole and 2 jt inside the surface casing.	Lead - 611sx Neocem 12.9ppg 60% Excess. 1000psi CSD after 10hrs Tail - 1432sx of Halcem 14.8ppg 60% Excess 1000psi CSD after 10hrs	P110 26# TCP 3880' of 5-1/2 P110 17# TCP
	3216	2nd Intermediate - Isolate the DMG, Bone Springs and WCA	Hard Drilling In the Brushy Canyon Seepage to Complete Loss		MWD GR	10M B Section 9400' of 9-5/8" 53.5# P110 BTC Special Drift to 8.535" Externally Coat 2600' Between	Stage 3: 0% Excess Lead 442sx Neocem 12.9 ppg Tail 201sx Halcem 14.8ppg 1000psi CSD after 10 hrs Cement to Surface	Duoline Internally Coated Injection Tubing
	5800 5885	Orill 6500' of 12-1/4" Hole 2900' - 9400' Set and Cement 9-5/8" Casing and Cement in 3	Water Flows Some Anhydrite H2S possible Production in the Bone Spring and Wolfcamp	Cut Brine	Triple combo + CBL of 13- 3/8" Casing	DV Tools DV tool at at 5800' ECP DV Tool 15' Inside Previous Casing Centralizers - bottom jt, 100'	Stage 2: 25% Excess Lead 456sx Neocem 12.9 ppg Tail 384 sx Halcem 14.8ppg 1000psi CSD after 10 hrs Stage 1: 25% Excess	
Wolfcamp -	9244 9,400	stages	Ballooning is possible in Cherry Canyon and Brushy if Broken Down			aside of DV tool, every 3rd joint in open hole and 5 within the surface casing	Lead 608sx Neocem 12.9 ppg Tail 471sx Halcem 14.8ppg. 1000psi CSD after 10hrs	
Atoka - 1 Morrow - 1	0419 0817 1319 2144	4th Intermediate Liner - to Isolate the Atoka Drill 3340' of 8-1/2" Hole	High Pressure (up to 15ppg) and wellbore instability (fracturing) expected in the Atoka	12.5 ppg OBM	MWD GR Triple combo,	3840' of 7-5/8" 39# P110 - USS FMJ Flush Joint (Gas Tight) VersaFlex Packer Hanger	Single Slurry 280sx Neocem 13.7ppg, 35% Excess. 1000psi CSD after 10hrs	7-5/8" x 5-1/2 TCPC Permanent Packer with High Temp
Woodford - 1 Perm Packer - 12	2642 2,680	9400' - 12,740' Set 7-5/8" Uner and Cement in Single Stage	150 target radius Hard Drilling in the Morrow Clastic	UBD/MPD Drilling Choke	CBL of 9- 5/8" Casing	Centralizers on and 1 jt above shoe jt and then every 2nd jt.	350 Excessi 2000ps and area some	Elastomer an full Inconel 92 trim
Devonian - 12,7 Montoya - 13,8 TD - 13,9	22 [,]	Injection Interval Drill 1,182 ' of 6-1/2" hole 12,740' - 13,922'	Chert is possible Loss of Circulation is expected H2S encountered on the Striker 3 well BHT estimated at 280F	Brine Water - possible flows	MWD GR Triple Combo with FMI, CBL of 7-5/8" Liner	Openhole completion	Displace wellbore with Clean Brine after running Injection String	

NGL Water Solutions Permian, LLC

Burton Flats SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information					
Lease Name	Burton Flats SWD				
Well No.	1				
Location	S-9 T-20S R-29E				
Footage Location	770' FSL & 165' FEL				

2

a. Wellbore Description

Casing Information								
Type	Surface	Intermediate 1	Intermediate 2	Production	Liner			
OD	26"	20"	13.375"	9.625"	7.625"			
WT	0.75"	0.500"	0.455"	0.545"	0.500"			
ID ID	24.500"	19.000"	12.415"	8.535"	6.625"			
Drift ID	24.500" 18.872"		12.259"	8.535"	6.500"			
COD	26"	21.00"	14.375" 10.625"		7.625"			
Weight	202 lb/ft	106.5 lb/ft	68 lb/ft	53.5 lb/ft	39 lb/ft			
Grade	X42	J-55	HCL-80	P-110	P-110			
Hole Size	30"	24"	17.5"	12.25"	8.5"			
Depth Set	350'	1,170'	2,900'	9,400'	8,900' - 12,740'			

b. Cementing Program

Cement Information								
Casing String	Surface	Intermediate 1	Intermediate 2	Production	Liner			
Lead Cement	Halcem	Extenda Cem	Neocem	Neocem, Neocem, Neocem	Neocem			
Lead Cement Volume	536	699	611	Stage 1: 608 sx Stage 2: 456 sx Stage 3: 442 sx	280			
Tail Cement	N/A	Halcem	Halcem	Versacem C, Halcem, Halcem	N/A			
Tail Cement Volume	Stage 1: 471 sx nt N/A 646 1,432 Stage 2: 384 sx		Stage 2: 384 sx	N/A				
Cement Excess	75%	75%	60%	25%	35%			
тос	Surface	Surface	Surface	Surface	8,900'			
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged			

3. Tubing Description

Tubing Information							
OD 7" 5.5"							
WT	0.362"	0.304"					
ID	6.276"	4.892"					
Drift ID	7.875"	6.050"					
COD	6.151"	4.653"					
Weight	26 lb/ft	17 lb/ft					
Grade	P-110 TCPC	P-110 TCPC					
Depth Set	0'-8,800'	8,800' -12,680'					

Tubing will be lined with Duoline.

4. Packer Description

7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

B. Completion Information

1. Injection Formation: Devonian, Silurian, Fusselman, Montoya (Top. 100')

2. Gross Injection Interval: 12,740' - 13,922'

Completion Type: Open Hole

3. Drilled for injection.

4. See the attached wellbore schematic.

5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Yates - Seven Rivers	1,184'
Delaware	3,216′
Bone Spring	5,885'
Wolfcamp	9,244'
Strawn	10,419'
Atoka	10,817'
Morrow	11,319'

VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 40,000 BPD Maximum Volume: 50,000 BPD

- 2. Closed System
- 3. Anticipated Injection Pressure:

Average Injection Pressure: 1,911 PSI (surface pressure)
Maximum Injection Pressure: 2,548 PSI (surface pressure)

- 4. The injection fluid is to be locally produced water. It is expected that the source water will predominantly be from the Bone Spring and Wolfcamp formations. Attached are produced water sample analyses taken from the closest wells that feature samples from the Yates, Delaware, Bone Spring, Wolfcamp, Strawn, Atoka, and Morrow formations.
- 5. The disposal interval is non-productive. No water samples are available from the surrounding area.

VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

A. Injection Zone: Siluro-Devonian Formation

Formation	Depth				
Rustler Anhydrite	224′				
Salado	402′				
Yates	1184'				
Capitan Reef	1490′				
Delaware	3216′				
Bone Spring	5885′				
Wolfcamp	9244′				
Strawn	10419′				
Atoka	10817′				
Morrow	11319				
Mississippian	12144′				
Woodford	12642'				
Devonian	12720′				
Montoya	13822′				

B. Underground Sources of Drinking Water

One water well exists within one mile of the proposed well location. This well is reported to have a depth of 140 ft and a depth to water of 100 ft. Water wells in the surrounding area have an average total depth of 180 ft and an average depth to water of 116 ft generally producing from the Santa Rosa. The upper Rustler may also be another USDW and will be protected. The Capitan reef and corresponding aquifer has been identified as a protectable water source, so an additional casing string will be set in the well.

IX. Proposed Stimulation Program

Stimulate with up to 50,000 gallons of acid.

X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

There are two water wells that exist within one mile of the proposed well location. If a sample can be obtained, analysis results will be provided as soon as possible. A map showing the two water wells and Water Right Summary from the New Mexico Office of the State Engineer for water well CP 01201 POD1 are attached.

XII. Affirmative Statement of Examination of Geologic and Engineering Data

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone (in the proposed <u>Burton Flats SWD #1</u>) and any underground sources of drinking water.

NAME: John C. Webb

TITLE: Sr. Geologist

SIGNATURE: John Cwall

ATE: May 7, 2019

Dhirici 1
1625 N French Dr., Hobbs, NM 88240
Phone, (575) 393-6161 Fax (575) 393-0720
Illitrici II
811 S Firm St., Artesia, NM 88210
Phone (575) 748-1283 Fax. (575) 748-9720
Phirici III
1000 Rio Brazos Road, Artec, NM 87410
Phone, (505) 334-6178 Fax. (305) 334-6170
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101 Revised July 18, 2013

Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

☐AMENDED REPORT

Phone: (505) 476-34	60 Fax: (505) 476-3462			Santa	Fe, NM 8	7505				
APPLIC	CATIO	N FOR	PERMIT TO Operator Name a	O DRILL, R	E-ENT	rer, de	EPEN, PI	LUGBACK	OGRID Nur		
		NGL V	VATER SOLUTION	IS PERMIAN, 1.1.C I. STE 306 K 79701			}		372338 ' API Numb	ет	
* Proper	y Code		NIDLAND, 12		roperty Nar Ion Flats SV	ne VD			TBD	Well No	
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UL - Loi	Section	Township	Range	Lot ldn	Feet from		5 Line	Feet From	E/W Line	County	
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				 Proposed 	Bottom	Hole Locs	tion				
UL - Lot	Section -	Township -	Range -	Lot ldn	Feet from	n No	S Line	Feet From	E/W Line	County -	
				¹ Poo	l Inform	ation					
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				SWD. DEVONIA			•			97869	
" Work	Tues		12 Well Type	Additional	Well In Cable/Rot		14.1	еазе Туре	1 15 4	Ground Level Elevation	
N N	турс		SWD		R	41,5	•	rivale		3,287.8'	
l ⁿ Mul N			17 Proposed Depth 13,922	1	18 Formatio Devoniar-Sil		19 (ontractor TBD		20 Spud Date ASAP	
Depth to	Ground wa	aler		Distance from n	carest fresh w 2,300°	rater well	<u> </u>	Dis	tance to nearest > 1 mi		
──We will be	using a c	closed-loop	system in lieu of	f lined pits							
	<u> </u>		21.	Proposed Casi	ing and (Cement Pr	ogram				
Туре	Hol	e Size	Casing Size	Casing Weig	hl/fl	Settin	g Depth	Sacks of C	ement	Estimated TOC	
Surface	 -	90"	26"	202 Ib/A		3	50'	536		Surface	
Intermediate 1	+	24"	20"	106.5 lb/r	A		170	1,345		Surface	
Intermediate 2		7.5"	13.375"	68 lb/ft			900'	2,04		Surface	
Production Prod. Liner		1.25"	9.625" 7.625"	53.5 lb/fl 39 lb/ft			100° - 12,740°	2,56		Surface 8,900'	
Tubing		VA	T'	26 lb/ft			8,800	N/A		N/A	
Tubing	-	V/Λ	5.5"	17 lb/ft			- 12,680'	N/A		N/A	
	I		Casir	ng/Cement Pro	gram: A	dditional (Comments		· _		
See attached sche	matic.								·		
			22.	Proposed Blov	vout Pre	vention Pr	ogram				
	Type		,	Working Pressure		Ì	Test Pressur	·e		Manufacturer	
Double I	lydrualic B	linds, Pipe		10,000 psi			8,000 psi		TBI) - Schaffer/Cumeron	
of my knowled	lge and be	hef.	•	uc and complete to	- 4		OIL C	ONSERVAT	TION DIV	ISION	
I further cert 19.15.14.9 (B)				9 (A) NMAC 🔲 a	nd/or	Approved B					
Signature:		7/1/	<u>/</u>		,]	pp.o.co u	· ·				
Printed name Christopher B Worland					Title	·					
Title: Consulti		•				Approved L	Date.	E	xpiration Dat	e·	
E-mail Addres											
Date: 5/2/2019)		Phone (512)	600-1764		Conditions of Approval Attached					

DISTRICT I State of New Mexico

ISSEN, FERRICE DE., BORRS, NW 65340

Phonon (670) 853-0161 Fair (670) 853-0762

DISTRICT II OIL CONSERVATION DIVISION

Bill S. MEST ST., ARTESIA, NW 88210

Phonon (670) 748-1253 Fair (670) 748-07720

1220 SOUTH ST. FRANCIS DR

Joint or Infill

Consolidation Code

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

DISTRICT III 1000 RIO BRAZOS RD., AZTEC. NM 87410 Phone: (505) 334-6178 Par: (505) 834-6170

DISTRICT IV

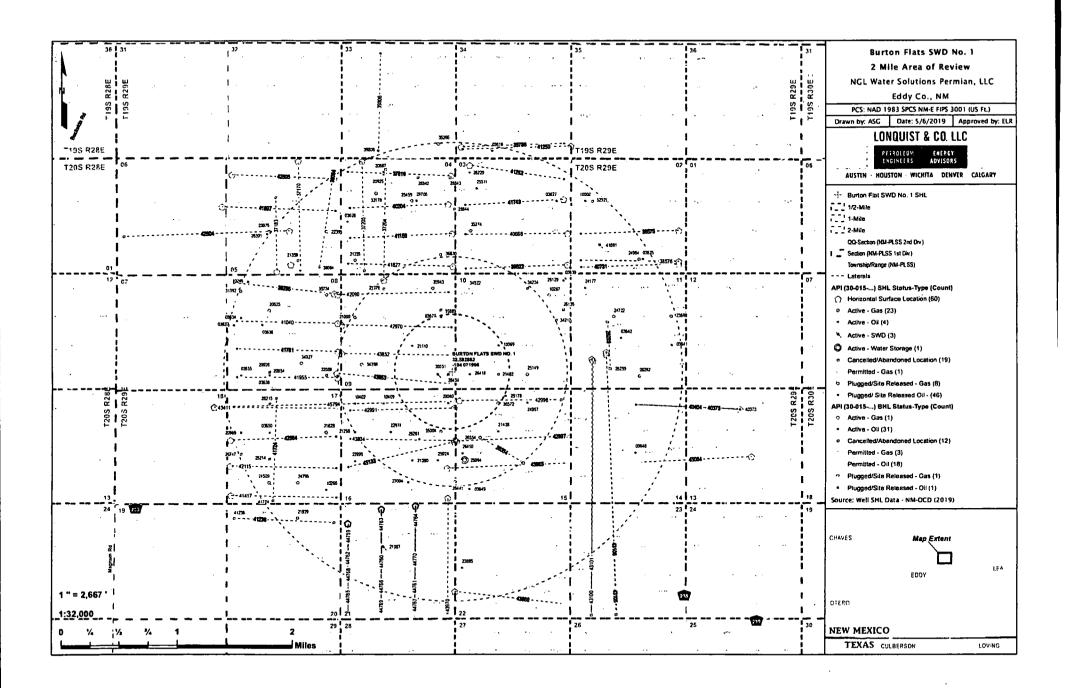
Dedicated Acres

API	Number		1	Pool Code			Pool Name		
				97869		SWI	D; DEVONIAN-SILE	URIAN	
Property	Code			BU	Property Nam URTON FLAT			Well Num	ber
OGRID N	lo.		·		Operator Nam	79	· · · · ·	Elevation	
372338				NGL WA	ATER SOLUTIONS	PERMIAN, LLC		328	7.8'
	***				Surface Loc	ation			
UL or lot No.	Section	Township	Range	Lot lân	Feet from the	North/South line	Peet from the	East/West line	County
Р	9	20-S	29-E		770	SOUTH	165	EAST	EDDY
			Bottom	Hole Lo	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

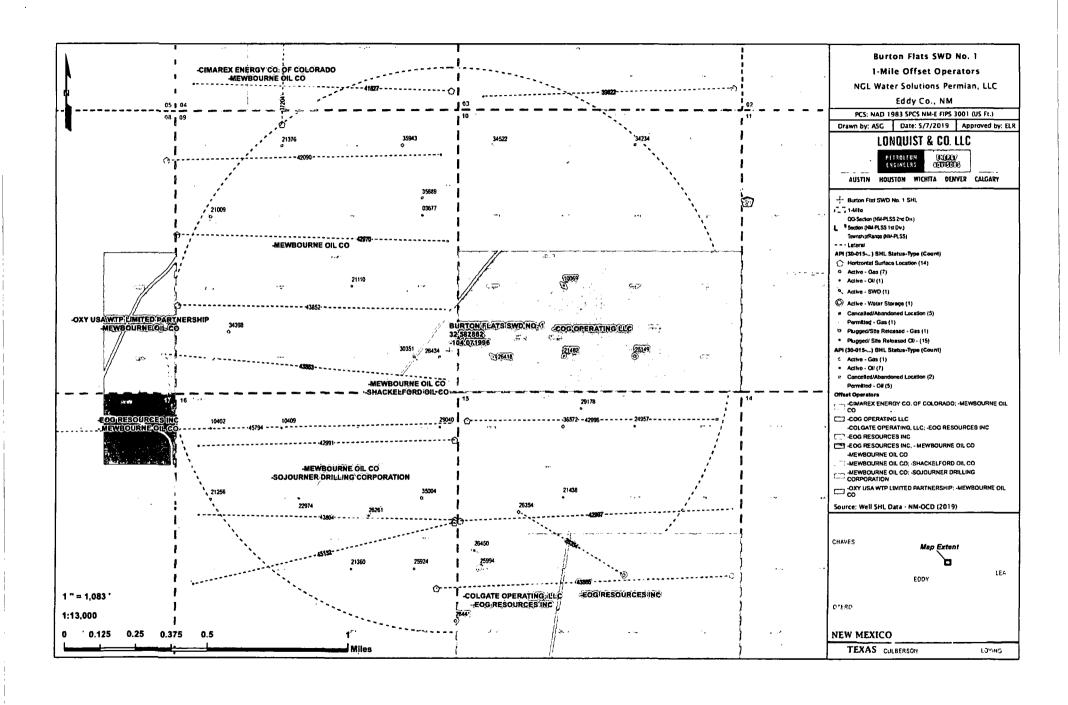
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

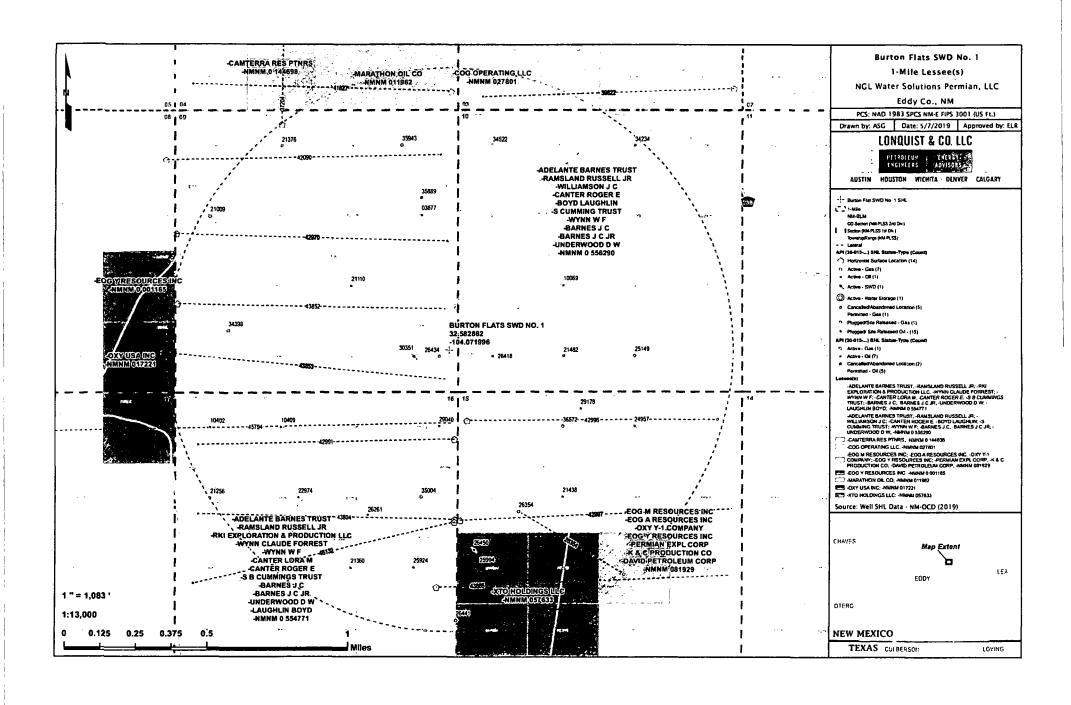
Order No.

OPERATOR CERTIFICATION I hereby cartify that the information herein is true and complete to the best of my knowledge and belief, and that this organisation either evens a working interest or unlessed 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 minoral or working interest, or to a voluntary pooling agroement or a compulsory pooling arrelated of the dirigion. Chris Weyand Printed Name Chris@lonquist.com	I hereby certify that the information broad is two and compiled to the their of which is five and compiled to the their of which is five and compiled to the their of which is five and compiled to the their of which the state of which is the state of which is the state of which is the state of the different of the state of the st	 OR A NON-STANDARD UNIT HAS BEE	IN APPROVED BY THE	DIAISION
SURVEYOR CERTIFICATION I hereby certify that the well location about 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 currect to the best of my bellef. MARCH 14, 2019 Y=575874.7 N X=621832.3 E LAT.=32.582862' N LONG.=104.071996' W SURVEYOR CERTIFICATION I hereby certify that the well location about on this plat was plotted from field notes of actual surveys and that the same is true and currect to the best of my bellef. MARCH 14, 2019 Date of Survey Signature & Senl of Professional Surveyor WEAL WEAL WEAL	S.L. 65' S.L	SURFACE LOCATION Y=575874.7 N . X=621832.3 E LAT.=32.582862* N	2.047 2.047 2.047	I hereby certify that the information berien is true and complete to the best of my knowledge and belief, and that this ingunisation either even a working interest or unlessed mineral interest in the land belieding the proposed bottom bole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a complexity pooling order heretofore entered in the division. Surveyor Certification E-mail Address Surveyor Certification I hereby certify that the will location shown on this plat was plotted from field motes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MARCH 14, 2019 Date of Survey Signature & Seal of Professional Surveyor HARCA 17777 A 17777 A 17777 A 17777 A 17777 A 17777 A 18/19 Certificate No. CHAD BARCROV 17777

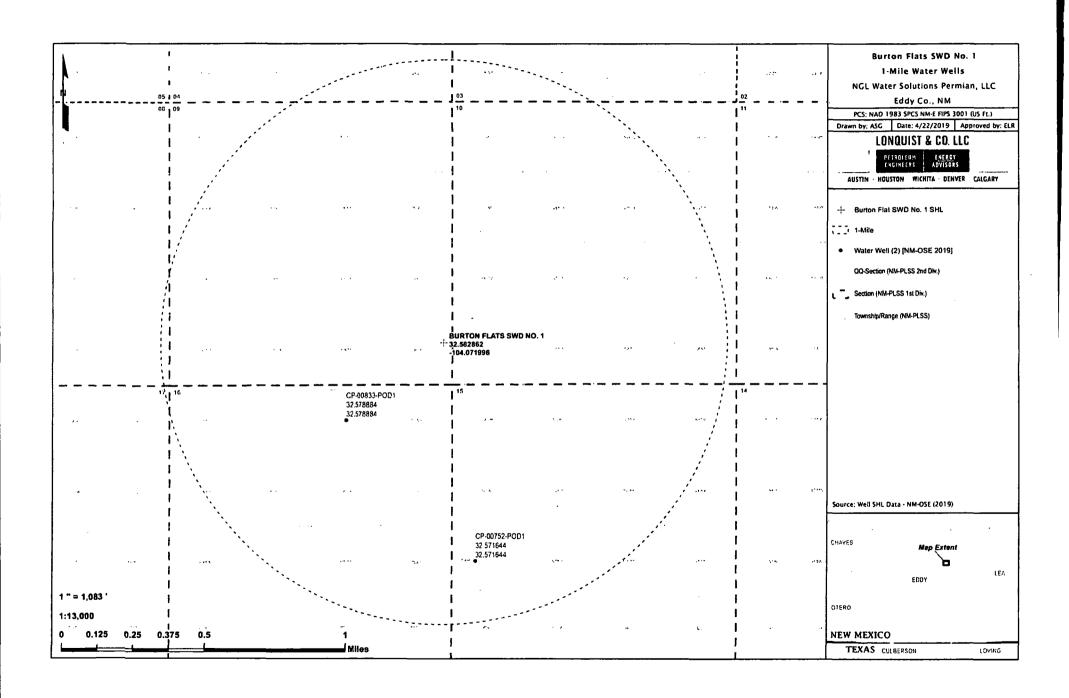


		CW TRANER	8	32.5796111000	104.064025900	9724/1997	VT35/0257.C
		MARATHON OR, CO	25711	32,58977890000	-104 0855/50000	12/31/9999	£(1)
		MARATHON OIL CO	11950	32.575275.4000	-104.065101600	12/31/9979	
		MARATHON OR CO	66666	32.5788994000	104.060783400	12/31/9999	(2747G) GFTTY, BOW
		J C WITHWEOM	66666	32.5825386000	104.069374100	666/10/21	
		J C WILLIAMSON	66666	32.5752640000	104.08540300	12/31/9999	[43-45] BURTON, DELAWARE, EAST
-		JCWILLIAMSON	0009	32.575.2716000	104.001184400	9661/21/9	
4		EOG RESOURCES INC	13100	32.5689545000	104071540500	065/11/8	(13400) BURTON (LAT. STRAWN, FAST (GAS)
		1 CWILLIAMSON	66666	32.5716476000	.104.074127200	12/31/999	IBJAS) BURTON, DELAWARE, EAST
¥		EOG RESOURCES INC	12520	32.5745354000	-104.067764300	7/1/900	[73400] BURTON FLAT, STRAWN, EAST (GAS)
		MEWBOURNE OIL CO	7953	32.5782569440	-104.071648080	\$100/62/K	123470) GETTY, GONE SPRING
×		MEWBOURNE OIL CO	0	32.5740871200	-104.071327570	12/11/9999	
ν		MEWBOURNE OIL CO	11950	32.5789037000	104 065094000	8002/41/6	73320] BURTON FLAT, MORNOW, EAST (GAS)
· •		MEWBOURNE OIL CO	6520	32.5658744270	104.028557880	5102/2/9	[49622] PARTWAY, BONE SPRING
		MEWBOUNG ON CO		37.5785696000	104 107735800	6666/11/21	[37470] GFTT, BORE SPRING
Λ	2	MEWBOURS OIL CO	12550	12.5962105000	104.071899400	12/2/2013	19522) PARTWAY, BONE SPRING
	•	MEWBOURSE OIL CO	0	32.5792184690	104.070920450	6666/1E/R1	127470] GETTY, BONE SPRING
z		NAEWBOURNE OIL CO	D	32.5852592100	104.038499400	6666/15/21	1996/21 PARICWAY, BONE SPRING
×	2	MEWBOURNE OIL CO	8003	32.5739999000	104.071670700	8102/52/18	[27470] GETTP, BONE SPRING
2	2	MEWBOUNG ON CO	٥	32.5827452000	104.089296500	6666/18/21	Pages Parichay Parichay Pages
4	¥	MEWBOURNE OIL CO	1603	32.5963211000	104.054801900	210Z/9Z/2	169G231 PARKWAY, BONE SPRUNG
N .	2	MEWBOURNE DIL CO	0	32.594500565.2	- 100 SE2 200 1 19	6666/TE/21	ASAZ31 PAZETWAY, BONE SPRING
A ME	Į.	MEWBOURNE OIL CO	11,600	37.5838737000	104 08545600	11/24/2005	[73320] BLIRTOW FLAT, MOSTOOW, EAST (GAS)
N. P.	M	INTEMBOURDE OU CO	11850	32.5934296000	104 074859600	8002/22/1	17370 SLATTON FLAT (MOSTOW) FAST (GAS)
y	2	MEWBOURNE ON CO	0	32,5907133840	104 073667358	12/31/9999	(73700) BURTON FLAT, AFORA, EAST (GAS)
2	2	MEWBOURNE ON CO	_ 0	32.5934296000	104 069 \$56500	666/10/21	[73320] BURTOM FLAT, MORROW, EAST (GAS)
W	2	METWBOURNE ON CO	12050	32.5752792000	104.073669400	1000/12/6	[73320] BLIRTON FIAT (GAS)
ν		MENTOURIE OR CO	6024	32,574;365500	104.071654100	8/1/2018	(274 TO) GETTY, BONE SPRING
, ν		MEWBOURNE OR CO	7980	32.5926933000	-104.089149500	1/30/2014	(5052) PAREVAY, BONE SPRING.
, i		WPX Energy Permisn, U.C.	99999	32.5716438000	-104.077964800	12/31/9999	(\$2345) BURTON, DELAWARF, EAST
·		SHACKEU ORD OR CO	0561	32.5825386000	104.074150100	Bbs1/97/8	I BIRD GATES
		SHACKE LFORD OIL CO	- 6	12.57891080000	. 104 67 259 3 70000	6666/11/61	G360ANDAKED
] (RAY WESTALL	99999	12.5775555000	104.07045750000	13/31/9999	[8345] BURTON, DILAWARE, LAST
()		RAY WESTALL	0	32,5934143000	-104.060760500	666/11//N	12747D; BONE SPRING
		COG CIPERATING LLC	99999	32.58752720000	104.06077580000	SB51/4/1	[73400] BUNTON FLAT, STRAWN, EAST (GAS)
noros v	noros	SCHOLINER DRILLING CORPORATION	9009	32.57437130000	104.07683900000	4/17/1990	(834S) BURTON, DITAWARF, BAST
ν	ם	COLGATE OPERATING, LLC	1567	32,5716476000	104.070106500	8861/12/01	(96060) WC, DELAWARE (GASJDO NOTI USE; 196995) WSW, DELAWARE
ž.	Ė	PRE-CHIGARD WELL OPERATOR	۰	32.5498016000	-104.073661800	0061/1/1	
-	E	PRE-ONGARD WELL OPERATOR	٠	32.5789956000	104 (265,402)00	0061/1/1	
100	ž	PRE-ONGARD WELL OPERATOR	٥	17.5851626000	. 104 065,085400	86//2	
-	Ē	PIG-CINCARD WILL OPERATOR	۰	32.578994000	104.082752500	1/1/1900	
2	8	PRE-CHICARD WELL OPERATOR	٥	32.5825377679	104.065061341	12/31/9999	6
-		PRE-DISSARD WELL OPERATOR	۰	32.5934203228	· 104 052701576	12/31/9999	
		FRE-CHGARD WILL OPFRATOR	0	32.5261676000	104.077949500	1/1/1900	
د		PRE-CHISARD WELL CPERATOR	0	32.5825438328	- 104.077597745	13/31/999	





							Burton Flats	SWD	#1: Offsett	ng Produced V	Vater Analysis							
wellname	api	section	township	range	unit	county	formation	ph	tds_mgL	sodium_mgL	calcium_mgL	iron_mgL	magnesium_mgL	manganese_mgL	chloride_mgL	bicarbonate_mgL	sulfate_mgL	co2_mgL
NORTH HACKBERRY YATES UNIT #104	3001504624	24	195	30E	E	EDDY	YATES			23210	1203	0	2004		41145	0	2901	
NORTH HACKBERRY YATES UNIT #109	3001504625	24	195	30E	K	EDDY	YATES		79905						43785			
BIG EDDY FEDERAL #098	3001524707	7	215	28E	F	EDDY	DELAWARE	8.4	153408	55912.7	6545.31	17.696	1954.3		103522	718.9	247.744	
GOLDEN D FEDERAL #002	3001527060	8	215	29E	0	EDDY	DELAWARE	6.9	242051	59394.7	39587.6	103.95	3865.79		173806	281.82	781.935	
CHAPARRAL ST #002	3001503612	32	195	29E	D	EDDY	BONE SPRING		33760						15600	290	5500	
STONEWALL DS FEDERAL COM #002	3001521640	29	205	28E	J	EDDY	BONE SPRING	8	142444	45649.6	10949.3	5.455	1820.88		93828.2	678.602	1878.7	
BERYL 33 FEDERAL COM #002H	3001539806	33	195	29E	N	EDDY	BONE SPRING 2ND SAND	6.5	211695.4	65998.6	10786.1	36.5	2077		129141.8		628.5	3400
JASPER 32 STATE COM #004H	3001538476	32	195	29E	А	EDDY	BONE SPRING 2ND SAND	6.8	203063	60960.2	10275.7	45.5	1680		127494.9		669.3	360
TURQUOISE PWU 27 #010H	3001543321	28	195	29E	Н	EDDY	BONE SPRING 3RD SAND	7.1	105001	35623.7	3951	18.3	690.1		62695.3		684.5	1200
DIAMOND PWU 22 #011H	3001542809	21	195	29E	I	EDDY	BONE SPRING 3RD SAND	7.7	117584.8	38612.9	4526.1	39.4	774		71782.3		549.7	190
STATE AC COM #001	3001522299	21	205	28E	J	EDDY	WOLFCAMP	6.2	43441						26100	446	100	
FED UNION #001	3001502416	22	205	28E	0	EDDY	WOLFCAMP	6.7	55965						32400	252	2260	
TRIGG AIN FEDERAL #001	3001526697	28	205	29E	Н	EDDY	STRAWN	6.1	90200.5		8440	15	248.5		55380	244	12.5	
YATES FEDERAL #001	3001520008	32	205	29E	P	EDDY	STRAWN	5.9	108466						66700	146	270	
BIG EDDY UT #001	3001502475	36	215	28E	C	EDDY	ATOKA		31911						18000	1220	887	
STATE #001	3001503625	2	205	29E	0	EDDY	MORROW		31170									
DOOLEY #001	3001510044	24	205	29E	M	EDDY	MORROW		11718						4466	1634	1441	





New Mexico Office of the State Engineer **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

2 1 18 20S 29E

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag

POD Number CP 01201 POD1 Q64 Q16 Q4 Sec Tws Rng

X

582983

3605121

Estimated Yield: 100 GPM

Driller License: 1348

Driller Company: TAYLOR WATER WELL SERVICE

Driller Name:

TAYLOR, CLINTON E.

Drill Start Date: 10/24/2013

Drill Finish Date:

10/24/2013

Plug Date:

Log File Date:

11/08/2013

PCW Rcv Date:

Shallow

Pump Type:

Pipe Discharge Size:

Source:

Casing Size:

6.00

Depth Well:

140 feet

Depth Water:

100 feet

Water Bearing Stratifications:

Top Bottom Description

100

Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

79 119

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/23/19 12:16 PM

Page 1 of 1

POD SUMMARY - CP 01201 POD1