Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-44530	
5. Indicate Type of Lease STATE ☐ FEE ☒	
6. State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name ALPHA SWD
1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD	8. Well Number 2
2. Name of Operator NGL WATER SOLUTIONS PERMIAN LLC	9. OGRID Number 372338
3. Address of Operator 1509 W WALL ST, STE 306 // MIDLAND, TX 79701	10. Pool name or Wildcat SWD; SILURIAN-DEVONIAN
4. Well Location Unit Letter C : 236 feet from the NORTH line and 2433 feet from the WEST line Section 18 Township 23S Range 28E NMPM County EDDY	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3,050' GL

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 26 2018
RECEIVED

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☒	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

- Updates to the geologic prognosis for this well have resulted in some modifications to casing setting depths. The operator requests approval to build the well as shown in the attached schematic. Other than changes in setting depths and cement vols, the only fundamental change is to drill a 24" surface hole instead of 26".

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Consulting Engineer DATE 09/26/2018

Type or print name Chris Weyand E-mail address: chris@lonquist.com PHONE: (512) 600-1764

For State Use Only

APPROVED BY: [signature] TITLE Geologist DATE 10-2-2018

Conditions of Approval (if any):

NGL Alpha SWD #2
Eddy County NM
Vertical Injection - Devonian, Silurian, Fusselman

Location - Sec 18, Township 23 S, Range 28 E | **AFE - 1428** | **Drilling Cost - $6.97MM**

TD 15055' | **GL/KB** 3051'/3079'

Directions to Site - Hwy US-285: 10 miles south of Carlsbad, NM; 2.3 miles north of Loving, NM. Turn west onto Carrasco Road. Travel 0.3 mile. Location is on south side of road.
Lat/Long: 32.311638,-104.127299

Geologic Tops (MD ft)	Section	Problems	Bit/BHA	Mud	Casing	Logging	Cement (HOLD)	Injection String
Surface TD - 450'	**Surface** Drill 24" 0' - 450'. Set and Cement 20" Casing	Loss Circulation Hole Cleaning and Wellbore stability in the Red Beds Anhydrite in the Rustler	24" Tricone 9-5/8" x 8" MM 9 jts: 8" DC 3 jts: 5" HWDP 5 " DP to surface	Spud mud	450' of 20" 94# J55 BTC Centralizers - bottom 2 joints and every 3rd jt thereafter, Cement basket 5th jt from surface	No Logs	Thixotropic Cement 3hr TT, Class C 1000psi compressive strength after 10hrs 25% Excess	9000' of 5.5" 17ppf, P110 TCPC Duoline Internally Coated Injection Tubing
Castile - 890' Top of 1st Stage Tail - 425' 9-5/8" ECP DV Tool at 2400' **1st Int TD - 2450'**	**1st Intermediate** Drill 2000' of 17-1/2" Hole 450' - 2450' Set and Cement 13-3/8" Casing	Seepage Losses Possible H2S Anhydrite Salt Losses in the Bell Canyon.	17-1/2" PDC 8" MM" DC 5" HWDP and 5" DP to Surface **300' Radius**	Brine with sweeps	5M A Section Casing Bowl 2450' of 13-3/8" 68# L80 BTC Centralizers - bottom jt, every 3rd joint in open hole and 2 jt inside the surface casing	Mudlogger on site by 1000' MWD GR Triple combo wireline logs	Lead: 13.5ppg - 4hr TT Class C 1000psi CSD after 10 hrs Cement to Surface 10% Excess salt cement Tail: 14.8ppg - 3hr TT	
Lamar Limestone - 2452' Bell Canyon - 2460' Cherry Canyon - 3548' Brushy Canyon - 5001' **DV Tool - 5500'** Top of 1st Stage Tail - 7500' **3rd Int Liner Top - 9000'** Wolfcamp - 9326' **2nd Int TD - 9500'**	**2nd Intermediate** Drill 7050' of 12-1/4" Hole 2450' - 9500' Set 9-5/8" Intermediate Casing and Cement in 3 Stages	Hard Drilling in the Brushy Canyon. Seepage to complete loss Water flows Some Anhydrite H2S possible Production in the Bone Spring and Wolfcamp Ballooning is possible in Cherry Canyon and Brushy if broken down	12-1/4" PDC 8" MM 9jts: 8" DC 8" Jars 21 jts: 5" HWDP 5" DP to Surface	OBM	10M B Section 9500' of 9-5/8" 53.5# HCL80 BTC DV tool at at 5500' and 2400'. Extermally Coated from 5500 to 2400'. The rest sandblasted Centralizers - bottom jt, 100' aside of DV tool, every 3rd joint in open hole and 5 within the surface casing	MWD GR Triple combo + CBL of 13-3/8" Casing	Lead: 13.5ppg Class C - 5.5hr TT 1000psi CSD after 10 hrs Cement to Surface 10% Excess Tail: 14.8ppg Class H - 4hr TT Lead: 13.5ppg Class C - 8hr TT 1000psi CSD after 10 hrs Cement to Surface 10% Excess Tail: 14.8ppg Class H - 7hr TT	4750' of 5" 15ppf, P110 TCPC Duoline Internally Coated Injection Tubing
Atoka - 11168' Morrow - 11896' Woodford - 13643' Perm Packer - 13750' **3rd Int TD - 13789'**	**3rd Intermediate** Drill 4300' of 8-1/2" Hole 9500' - 13800' Set 7-5/8" Liner and Cement in Single Stage	High Pressure (up to 13ppg) and wellbore instability (fracturing) expected in the Wolfcamp. Production in the Wolfcamp, Atoka and Morrow. Hard Drilling in the Morrow Clastic	8-1/2" PDC 6-3/4" MM 6" DC 6" Jars 5" HWDP and 5" DP to Surface	Weighted OBM	4489' of 7-5/8", 39#, P110 - EC HDL - Vam FJ. Sandblasted Centralizers on and 1 jt above shoe jt and then every 2nd jt.	MWD GR Triple combo, CBL of 9-5/8" Casing	Single slurry: 13.2ppg TT 7hrs Class H Cement 1000psi CSD after 10 hrs 10% Excess	7-5/8" x 5" TCPC Permanent Packer with High Temp Elastomer and full Inconel 925 trim
Devonian - 13789' Silurian Carbonate - 14334' Fusselman - 14639' Montoya - 14952' **TD - 15055'**	**Injection Interval** Drill 1255' of 6-1/2" hole 13800' - 15055'	Chert is possible. Loss of Circulation is expected. H2S encountered on the Striker 3 well. BHT estimated at 280F	6-1/2" PDC 4-3/4"MM 4-3/4" DC 4-3/4" Jars 4" DP to Surface	Fresh Water - possible flows	Openhole completion	MWD GR Triple Combo with FMI, CBL of 7-5/8"	Displace with 3% KCl (or heavier brine if necessary)	

NGL Energy Partners LP

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