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Applicant: Intrepid Potash Ne			0	GRID Number: 372681	
Vell Name: Intrepid SWD No				PI:30-015-xxxxx	
ool: Proposed: SWD, Devonia	n-Silurian		Po	ool Code: 97869	
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1) TYPE OF APPLICATION: A. Location - Spacin	Check those whing Unit – Simultar NSP(PROJE For [1] or [1] - Storage – Med CTB PLC Sposal – Pressure PMX SWE ED TO: Check the ors or lease holde ding royalty own equires published ad/or concurrent	INDICATED BELOW nich apply for [A] neous Dedication ctarea	CORATION UNIT) OLM Ced Oil Rec	OCT 22 2018 at 1015 SD FOR OCD C Notice Comp	<u>ONL)</u>
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3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an Individual with managerial and/or supervisory capacity.

	10/19/2018
n Stone	Date
nt or Type Name	
	903-488-9850
20	Phone Number
Sen June	ben@sosconsulting.us
nature	e-mail Address



October 19, 2018

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

Attn: Ms. Heather Riley, Director

Re: Application of Intrepid Potash-New Mexico, LLC to permit for salt water disposal in the proposed Intrepid SWD Well No.2, to be located in Section 2, Township 21 South, Range 29 East, NMPM, Eddy County, New Mexico.

Dear Ms. Riley,

Please find enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request to permit for disposal, the Intrepid SWD No.2.

Intrepid Potash-New Mexico seeks to optimize efficiency, both economically and operationally, of its operations and to offer additional disposal options for operators in southeast New Mexico. Approval of this application is consistent with that goal as well as the NMOCD's mission of preventing waste and protection of correlative rights.

Published legal notice will run on or about October 21, 2018 in the edition of the Artesia Daily Press and all offset operators and other interested parties have been notified individually. The legal notice affidavit will be forwarded when received. This application also includes a wellbore schematic, area of review maps, leaseholder plats and other required information for a complete Form C-108. The well is located on private land and minerals. As offset mineral owners, a copy of this application has been submitted to the Bureau of Land Management, Carlsbad Field Office, Oil and Gas Division as well as the State Land Office, Oil and Gas Division.

I respectfully request that the approval of this salt water disposal well proceed swiftly and if you or your staff requires additional information or has any questions, please do not hesitate to call or email me.

Best regards,

Ben Stone, Partner SOS Consulting, LLC

Agent for Intrepid Potash-New Mexico, LLC

Cc: Application attachment and file

STATE OF NEW MEXICO **ENERGY, MINERALS AND NATURAL** RESOURCES DEPARTMENT

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

FORM C-108 Revised June 10, 2003

<u>APPLICATION FOR AUTHORIZATION TO INJECT</u>

I. PURPOSE: Sait Water Disposal and the application QUALIFIES for administrative approval.

II. OPERATOR: ADDRESS:

Intrepid Potash-New Mexico, LLC (Ogrid 372681) 1001 17TH St., Ste.1050, Denver, CO 80202

CONTACT PARTY: Agent: SOS Consulting, LLC - Ben Stone (903) 488-9850

- III. WELL DATA: All well data and applicable wellbore diagrams are ATTACHED.
- This is not an expansion of an existing project. IV.
- A map is attached 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. A tabulation is attached of data on all wells of public record within the area of review which penetrate the proposed injection zone. There are NO (0) Wells in the subject AOR which Penetrate the proposed Devonian interval. The data includes a description of each well's type, construction, date drilled, location, depth, and a schematic of any plugged well illustrating all plugging detail. NO P&A Wells penetrate.
- VII. The following data is ATTACHED on the proposed operation, including:
 - Proposed average and maximum daily rate and volume of fluids to be injected;
 - 2. Whether the system is open or closed;
 - 3. Proposed average and maximum injection pressure;
 - 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and.
 - 5. 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. Appropriate geologic data on the injection zone is ATTACHED 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. Stimulation program – a conventional acid job may be performed to clean and open the formation.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). Well Logs will be filed with OCD.
- There are several water wells (others, monitor or abandoned) within one mile of the proposed salt water disposal well. *XI. The Intrepid water well monitoring report for 2 wells within 1 mile is ATTACHED.
- XII. An affirmative statement is ATTACHED that available geologic and engineering data has been examined and no evidence was found of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. "Proof of Notice" section on the next page of this form has been completed and ATTACHED. There are 3 offset lessees within 1 mile, BLM and state minerals - all have been noticed. Well location is Private.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

DATE:

10/18/2018

TITLE: SOS Consulting, LLC agent for Intrepid Potash-NM, LLC NAME: Ben Stone SIGNATURE:

E-MAIL ADDRESS: ben@sosconsulting.us

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:

FORM C-108 - APPLICATION FOR AUTHORIZATION TO INJECT (cont.)

III. WELL DATA - The following information and data is included (See ATTACHED Wellbore Schematic):

- 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 pursuant to the following criteria is ATTACHED.

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: *Affidavit will be FORWARDED upon receipt*.

- (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.



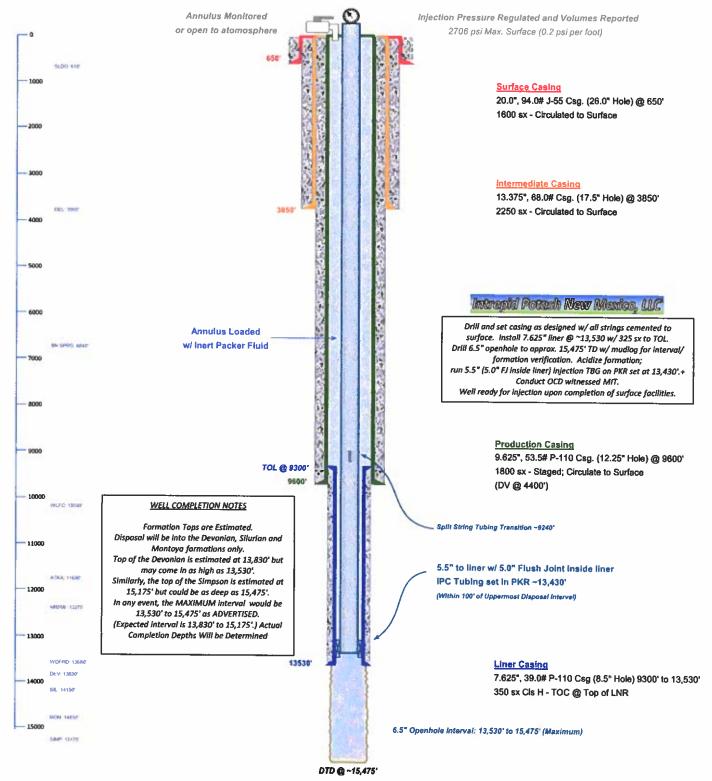
WELL SCHEMATIC - PROPOSED Intrepid SWD Well No.2

API 30-015-xxxxx

505.6' FNL & 1474.7' FEL, SEC. 2-T21S-R29E EDDY COUNTY, NEW MEXICO

Proposed: SWD; Devonian-Silurian-Montova

Spud Date: 1/15/2019 SWD Config Dt: 2/15/2019

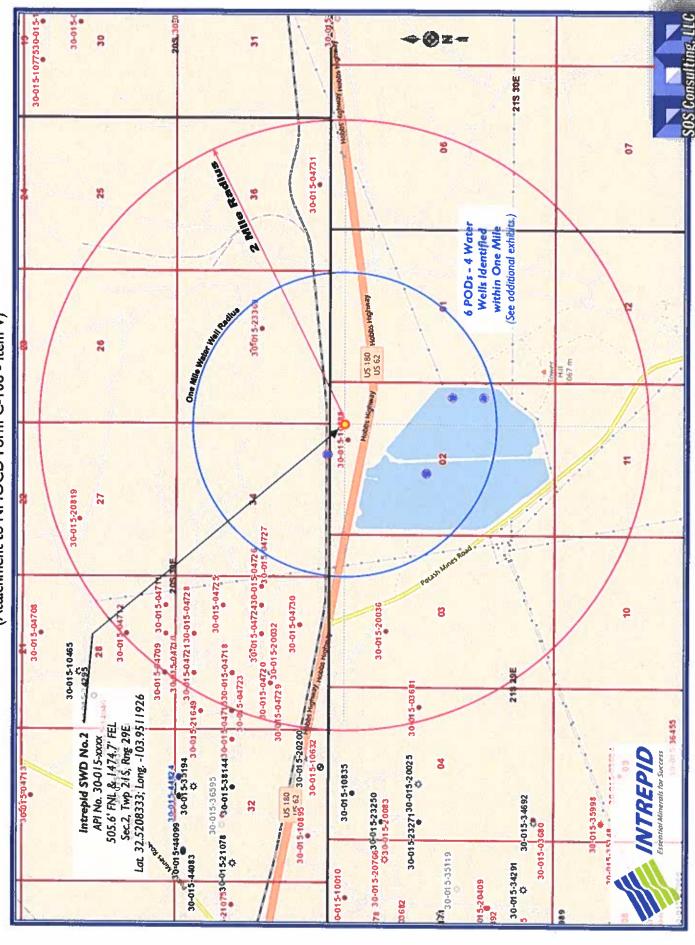


Drawn by: Ben Stone, Rvs'd 10/18/2018



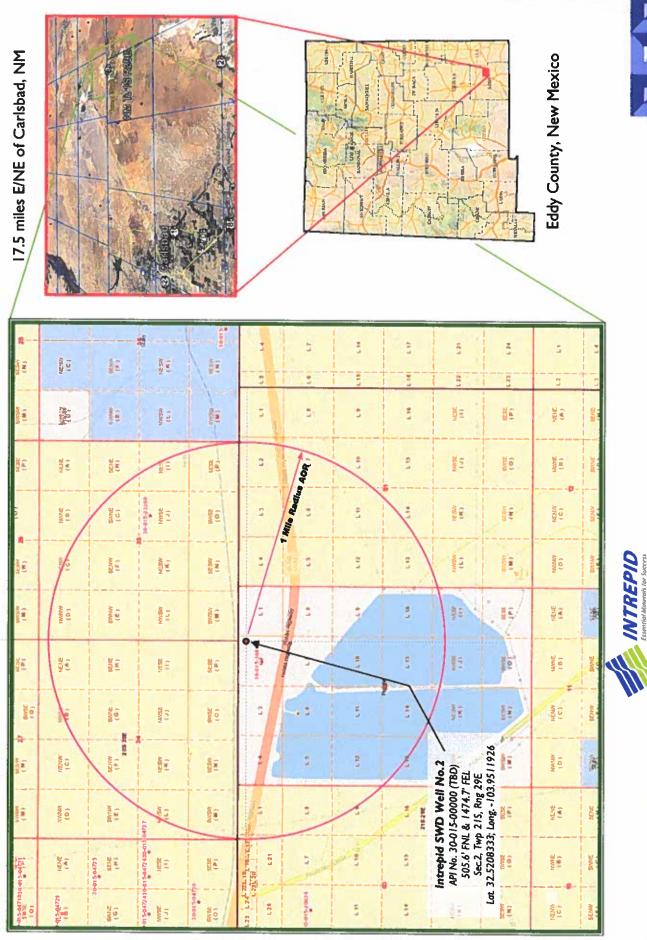
Intrepid SWD No.2 - Area of Review / 2 Miles

(Attachment to NMOCD Form C-108 - Item V)



Intrepid SWD Well No.2 - Area of Review / Overview Map

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)





C-108 ITEM X

LOGS and AVAILABLE TEST DATA

A Standard Suite of Logs will be run after drilling the well and submitted to the Division.

C-108 Item VII

Proposed Operation

Intrepid SWD No.2

Commercial SWD Facility

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take approximately 6-8 weeks. Facility construction including installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval but at a different location from the well. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment.

Configure for Salt Water Disposal

Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD and BLM test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity.

Operational Summary

The SWD facility will not be fenced so that trucks may access for load disposal 24/7.

The well and injection equipment will be a closed system and equipped with pressure limiting devices and volume meters. The annulus, loaded with an inert, anti-corrosion packer fluid, will be monitored for pressure.

The tanks will be equipped with telemetry devices and visual alarms to alert the operator and customers of full tanks or an overflow situation.

Anticipated daily maximum volume is 30,000 bpd and an average of 17,500 bpd at a maximum surface injection pressure of 2706 psi (.2 psi/ft gradient – maximum pressure will be adjusted If the top of interval is modified after well logs are run).

Potential releases will be contained and cleaned up immediately. The operator shall repair or otherwise correct the situation within 48 hours before resuming operations. OCD will be notified within 24 hours of any release greater than 5 bbls. If required, remediation will start as soon as practicable. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC; as necessary and appropriate and OCD form C-141 will be submitted promptly.

C-108 ITEM VII - PRODUCED WATER ANAYLSES

Item VII.4 - Water Analysis of Source Zone Water

Glorieta/ Yeso Bone Spring Wolfcamp

Item VII.5 - Water Analysis of Disposal Zone Water

Devonian

Water Analyses follow this page.

SOURCE ZONE

GLO/Y	ESO									Lab ID			
										Sample	. In		1146
API	l No	3001524	754							Sample			1140
We	II Name	PLATT F	PA			009				Cample	140		
	Location	ULSTR	26	18	S 26	E		Lat / Long	32,71216	-104	.35742		
		3	30	S	990	W				County	Eddy		
	Operator	(when sa	mple	I)	Yates I	Petroleum (Corp.						
			Fiel	d	ATOKA	A				Unit M			
	San	iple Date			8/4/198	34	Analy	sis Date					
			San	nole S	ource W	/elihead			Depth ((if known)			
				ter Ty		roduced Wa	ater		Борит	iii Kilowii)			
	ph					7.5		alkalinit	y_as_caco3	maL			
	ph_ten	no F							ss_as_caco3	_			
		cgravity							ss_mgL	9-		1800	
		cgravity_t	omn i	=								1000	
		_	emp_r			40000			ity_ohm_cm				
	tds_m	-				120382			ity_ohm_cm_	_temp			
	tds_m	gL_180C						conduc	tivity				
	chlorid	e_mgL				113000		conduc	tivity_temp_f	=			
	sodiun	n_mgL				71415		carbona	ate_mgL			0	
	calciur	n_mgL				2560		bicarbo	nate_mgL			476	
	iron_m	ıgL				0		sulfate_	_mgL		2	2001	
	barium	_mgL						hydroxid	de_mgL				
	тадле	sium_mg	L			0		h2s_mg	gL			0	
	potass	ium_mgL						co2_mg	j L				
	strontic	ım_mgL						o2_mgl	-				
	manga	nese_mg	Ļ					anionre	marks				

(Produced water data courtesy of NMT Octane NM WAIDS database.)

Remarks



SOURCE ZONE

GLO/YESO	Lab (D
----------	--------

Sample ID 1207 3001524619 **API** No

Sample No **Well Name** PLATT PA 800

Location ULSTR 26 S 26 Ε 18 Lat / Long 32,71245 -104.35329

> 430 S 2260 W County Eddy

Operator (when sampled) Yates Petroleum Corporation

> Field **ATOKA** Unit N

Sample Date 1/19/1985 Analysis Date

> Sample Source well head Depth (if known)

Water Typ **Produced Water**

6 alkalinity_as_caco3_mgL ph_temp_F hardness_as_caco3_mgL

specificgravity hardness_mgL 11500

specificgravity_temp_F resistivity_ohm_cm

tds_mgL 136324 resistivity_ohm_cm_temp_

tds_mgL_180C conductivity

chloride_mgL 121000 conductivity_temp_F

sodium_mgL 61571 carbonate_mgL calcium_mgL 4160 bicarbonate_mgL

104 iron_mgL 0 sulfate_mgL 3720

barlum_mgL hydroxide_mgL

magnesium_mgL 7340 h2s_mgL potassium_mgL co2_mgL

strontium_mgL o2_mgL

manganese_mgL anionremarks

Remarks

ph

(Produced water data courtesy of NMT Octane NM WAIDS database.)



SOURCE ZONE

BONE SPRING	3						Lab (D		
API No Well Name	300152022 BIG EDDY			012			Sample Sample		5847
	ULSTR :	-	S 31	E 012	Lat / Long	32,56399	"10 3	3,87994	
	660		660	w	est reving	02400000	County	Eddy	
Operator	(when sam	pled)	MALLO	N OIL COM	/PANY				
		Field	BIG EDI	DΥ			Unit D		
Sar	nple Date		8/27/1999	9	Analysis Date	8/3	31/1999		
		Sample :	Source			Depth (i	f known)		
		Water Ty	/p						
ph				5,2	alkalinit	y_as_caco3_	mgL		
ph_te	mp_F				hardnes	ss_as_caco3	_mgL		
specif	icgravity			1,125	hardnes	ss_mgL			
specif	icgravity_ter	mp_F			resistivi	ty_ohm_cm			
tds_m	gL			181697	resistivi	ty_ohm_cm_	temp_		
tds_m	gL_180C				conduct	tivity			
chloric	de_mgL			123750	conduct	ti vity_te mp_F	:		
sodiur	m_mgL			73895.6	carbona	ate_mgL			
calciu	m_mgL			5625	bicarbo	nate_mgL		13,725	
iron_n	ngL			337.5	sulfate_	mgL_		787.5	
bariun	n_mgL				hydroxid	de_mgL			
magn	esium_mgL				h2s_mg	J L		0	
potas	sium_mgL				co2_mg	jL			
stronti	um_mgL				o2_mgL	-			

(Produced water data courtesy of NMT Octane NM WAIDS database.)

anionremarks

manganese_mgL

Remarks



SOURCE ZONE

WOLFCAMP	
	Lab ID

API No 3001520138 Sample ID 5688

Well Name MAHUN STATE 001 Sample No

Location ULSTR 16 22 S 22 E Lat/Long 32.39340 +104.70979

1800 N 1980 W County Eddy

Operator (when sampled)

Field ROCKY ARROYO Unit F

Sample Date 5/17/1968 Analysis Date

Sample Sourc DST Depth (if known)

Water Typ

ph 8.6 alkalinity_as_caco3_mgL

ph_temp_F hardness_as_caco3_mgL

specificgravity hardness_mgL
specificgravity_temp_F resistivity_ohm_cm

tds_mgL 35495 resistivity_ohm_cm_temp_

tds_mgL_180C conductivity

chloride_mgL 19000 conductivity_temp_F

sodium_mgL carbonate_mgL

calcium_mgL bicarbonate_mgL 830

suffate_mgL

barium_mgL hydroxide_mgL

magnesium_mgL h2s_mgL

potassium_mgL co2_mgL

strontium_mgL o2_mgL

manganese_mgl. anionremarks

Remarks

iron_mgL

(Produced water data courtesy of NMT Octane NM WAIDS database.)



2500

DISPOSAL ZONE

DEVONIAN	Lab ID

API No. 3001510280 **Sample ID** 6170

Well Name JURNEGAN POINT 001 Sample No

Location ULSTR 05 24 S 25 E Lat/Long 32.24037 -104.42375

660 S 660 W County Eddy

Operator (when sampled)

Field WILDCAT Unit M

Sample Date 12/14/1964 Analysis Date

Sample Source DST Depth (if known)

Water Type

ph 7 alkainity_as_caco3_mgL

ph_temp_F hardness_as_caco3_mgL

specificgravity hardness_mgL

specificgravity_temp_F resistivity_ohm_cm

tds_mgL 229706 resistivity_ohm_cm_temp_

tds_mgL_180C conductivity

chloride_mgL 136964 conductivity_temp_F

sodium_mgL carbonate_mgL

calcium_mgL bicarbonate_mgL 198

iron_mgL suffate_mgL 2511

barium_mgL hydroxide_mgL

magnesium_mgL h2s_mgL
potassium_mgL co2_mgL
strontium_mgL o2_mgL

manganese_mgL anionremarks

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)



C-108 – Item VIII

Geologic Information

The Devonian, Silurian and upper Ordovician all consist of carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are present within the subject formations in the area. It is reasonable to assume that a Silurian section is present between the Devonian and Ordovician (Montoya) although the top depth of Silurian and Ordovician intervals is uncertain at this time. If the base of Devonian and top of Silurian and/or Ordovician rocks come in as expected the well will only be drilled deep enough for adequate logging rathole.

At a proposed depth of 15,275' below ground level (15,575' contingent) the well will TD approximately 1,500 to 2,000 feet below the estimated top of the Devonian. Mud logging through the interval will ensure the target interval remains in Devonian, Silurian and Ordovician. Once Devonian is determined, the casing shoe depth will be set at an approximate maximum depth of 13,530' BGL. Injection will occur through the resulting openhole interval.

COMPLETION NOTES: Lacking depth control in the immediate vicinity, formation tops are estimated. Disposal will be into the Devonian, Silurian and Montoya formations only. Top of the Devonian is estimated at 13,830' but may come in as high as 13,530'. Similarly, the top of the Simpson is estimated at 15,175' but could be as deep as 15,475'. In any event, the MAXIMUM interval would be 13,530' to 15,475' as ADVERTISED. (Expected interval may be 13,830' to 15,175'.) Actual completion depths will be determined by mud and openhole logs and will be reported by sundry notice and the C-105 completion report.

The Devonian is overlain by the Woodford Shale and Ordovician (Montoya) rock is underlain by the Middle and Lower Ordovician; Simpson and Ellenburger.

Fresh water in the area is generally available from the Rustler and overlying, localized occurrences of Dewey Lake or Quaternary deposits. State Engineer's records show water wells in the area with a depth to groundwater of 200 to 315 feet with an average depth to groundwater of 241 feet.

There are several water wells located within one mile of the proposed SWD (some are abandoned and some are monitor wells); Intrepid's monitoring reports are attached.

C-108 - Item VIII

Geologic Information

Formation Tops

Dan Tschopp, Corporate Manager of Geology and GIS Intrepid Potash Company

Formation	~TVD	Completed Interval	Contingency	Permitted Interval
SLDO	610			
DLWR	3,900			
BSPG	6,840			
WFMP	10,090			
ATOK	11,630			
MRRW	12,275			
MSSPL	13,230			
WDFDSH	13,680			
DVNN	13,830		-300	13,530
SLRN	14,150	13,830 to 15,175 plus/minus		,
MNTY	14,850	contingency	N .	
SMPS	15,175		+300	15,475
Total Depth	15,275		+300	15,575

C-108 – Item VIII

Geologic Information

Induced Seismicity Near Intrepid SWD 2 Proposed Location

Dan Tschopp, Corporate Manager of Geology and GIS Intrepid Potash Company

Five Mile Radius

There are two salt water disposal (SWD) wells within five miles of Intrepid's proposed SWD 2. Both inject into the Guadalupian.

Per the USGS Earthquake Hazards Program, there have been zero recorded earthquakes in the same radius. This is likely due to the lack of documented basement faults in the vicinity.

Please refer to the attached map for SWD locations and volume information, plus earthquake activity.

Ten Mile Radius

Due to lack of Devonian data within five miles, the search radius was increased to ten miles. At this point the SWD well count increases to thirteen, with four injecting in or below the Devonian.

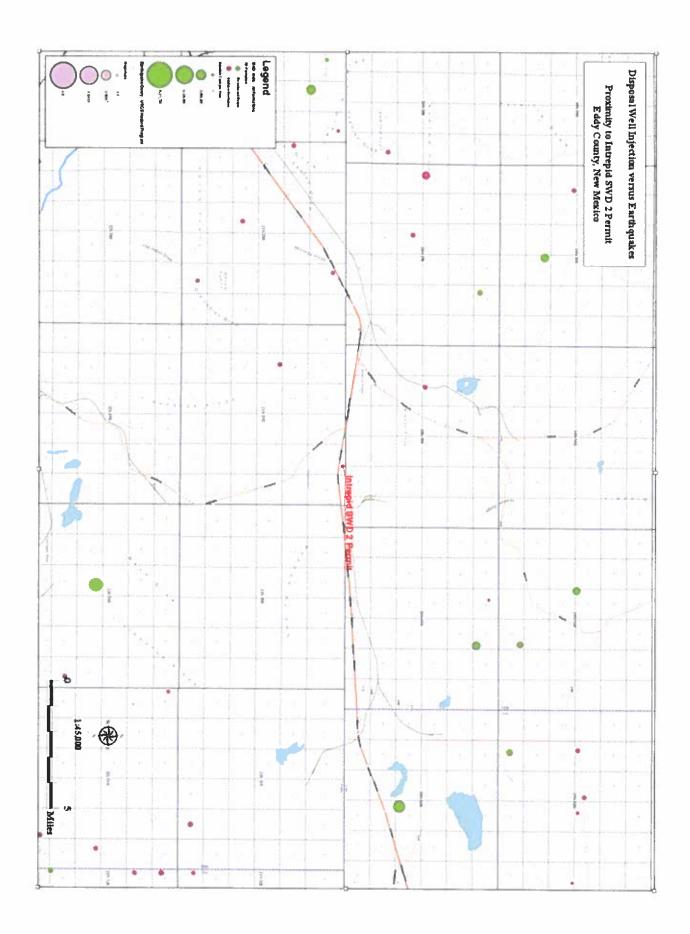
Despite the increase in well count and injection volumes, both above and below the Devonian, there are zero recorded earthquakes within this radius. This is likely due to the lack of documented basement faults in the vicinity.

Please refer to the attached chart for injection volume information for the wells discussed within the ten mile radius. Also, please revert to the map for SWD locations and volume information, plus earthquake activity.

Conclusion

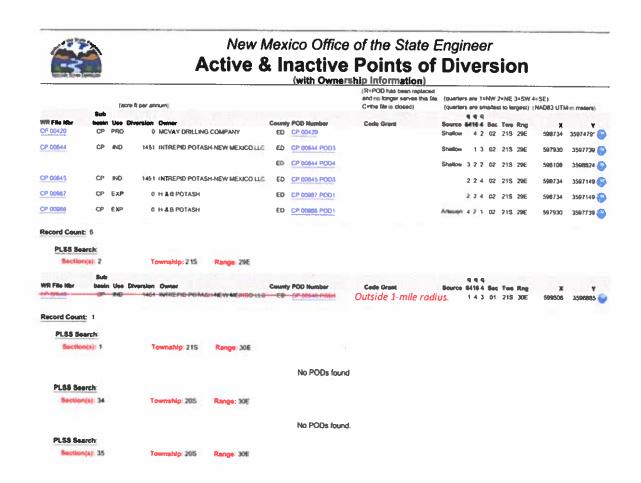
Due to the absence of earthquake activity in the area, and the distance from documented basement faults, there appears to be minimal risk of inducing seismicity in the vicinity of SWD 2.

Annual Salt Water Injection Volume within 10 miles of Proposed SWD 2



C-108 Item XI Water Wells in AOR

There are 4 water/monitoring wells (6 PODs) within one mile of the proposed SWD.



The monitoring reports for 2 of the closest wells follows in this section.

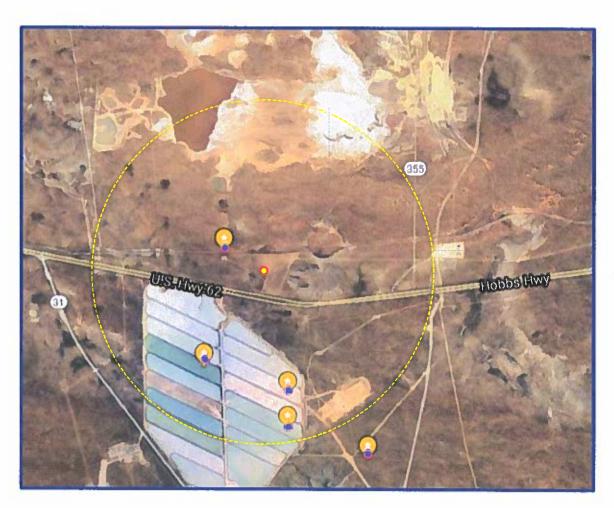
C-108 Item XI

Water Wells Within One Mile

Intrepid SWD No.2 - Water Well Locator Map

There are 4 water/ monitor wells/ (6 PODs) within a one-mile radius of the proposed SWD.

Intrepid's monitoring report for 2 wells is included.



Data from NM Office of the State Engineer displayed in Google Earth



C-108 ITEM XI - WATER WELLS IN AOR

Depth to Ground Water



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a

water right file.)

(R=POD has been replaced, O=orphaned,

closed)

C=the file is (9

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

	Contract to the second												
POD Number	POD Sub- Code basin	County		Q 16	-		Tws	Rng	x	Y			Water Column
C 02223	С	ED	1	2	2	36	218	29E	600316	3589948*	350	200	150
C 03764 POD1	CUB	ED	4	3	3	25	218	29E	599329	3590096	460		
CP 00420	СР	ED		4	2	02	21S	29E	598734	3597479*	308	210	98
CP 00430	СР	ED	1	4	1	03	21S	29E	596221	3597558*	360	225	135
CP 00644 POD3	СР	ED		1	3	02	218	29E	597931	3597739	400	248	152
CP 00644 POD4	СР	ED	3	2	2	02	215	29E	598109	3598824	518	315	203
CP 00988 POD1	CP	ED	4	2	1	02	215	29E	597931	3597739	400	248	152

Average Depth to Water: 241 feet

Minimum Depth: 200 feet

Maximum Depth: 315 feet

Record Count: 7

PLSS Search:

Township: 21S Range: 29E

^{*}UTM location was derived from PLSS - see Help

	Analytical Dat	
Table 4 - Groundwater Elevation and First Quarter 2018 Monitoring Report	4 - Ground	First Quarter 2018 Monitoring Report

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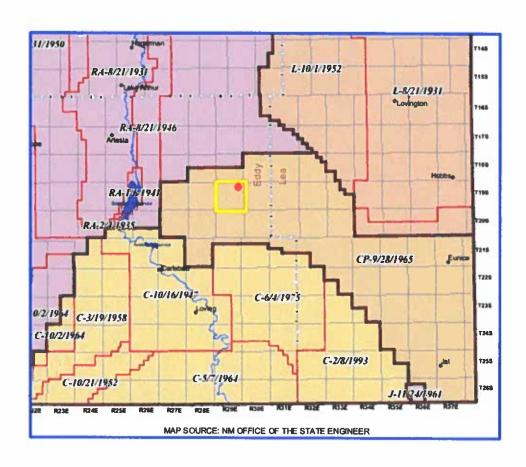
801

Table 4 - Groundwater Elevation and Analytical Data First Quarter 2018 Monitoring Report

Page 7 of 25

C-108 - Item XI

Groundwater Basins - Water Column / Depth to Groundwater



The subject well is located within the Capitan Basin.

Fresh water in the area is generally available from the Rustler and overlying, localized occurrences of Dewey Lake or Quaternary deposits. State Engineer's records show water wells in 21S-29E with an average depth to water at 241 feet.

There are 6 water or monitor wells located within one mile of the proposed SWD. Intrepid's monitoring and analyses reports for 2 of the wells is included.



C-108 Item XII

Geologic Affirmation

We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.

Ben Stone, Partner SOS Consulting, LLC

Project: Intrepid Potash-New Mexico, LLC

Intrepid SWD No.2 Reviewed 10/02/2018

C-108 ITEM XIII - PROOF OF NOTIFICATION

IDENTIFICATION AND NOTIFICATION OF INTERESTED PARTIES

Exhibits for Section

Affected Parties Map

List of Interested Parties

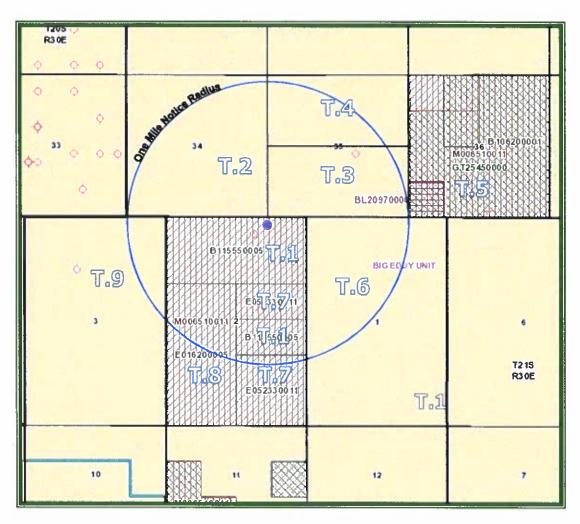
Notification Letter to Interested Parties

Proof of Certified Mailing

Published Legal Notice

Intrepid SWD No.2 - Affected Parties Plat

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)





LEGEND

T.1 - SLO-B1-1155-0005; Oxy USA WTP, LP

T.2 - BLM NMLC-0066156; CTV OG NM, others

T.3 - BLM NMNM-0006789; CTV OG NM, others

T.4 - BLM NMLC-0069227; CTV OG NM, others

T.5 - SLO-B1-0062-0001; Oxy USA WTP, LP

T.6 - BLM NMNM-0006745; Oxy USA WTP, LP

T.7 - SLO-E0-5233-011; Oxy USA WTP, LP

T.8 - BLM NMNM-0542015; Chevron USA

T.9 - BLM NMNM-0003926; CTV OG NM, others

C-108 ITEM XIII - PROOF OF NOTIFICATION AFFECTED PARTIES LIST

SOS Consulting is providing electronic delivery of C-108 applications.

ALL APPLICABLE AFFECTED PARTIES ARE PROVIDED A LINK IN THE NOTICE LETTER

TO A SECURE SOS/ CITRIX SHAREFILE® SITE TO VIEW AND DOWNLOAD

A FULL COPY OF THE SUBJECT C-108 APPLICATION IN PDF FORMAT.

SURFACE OWNER

INTREPID POTASH – NEW MEXICO, LLC (Applicant) 707 17TH St., Ste.4200 Denver, CO 80202

MINERALS LESSEES (All Notified via USPS Certified Mail)

<u>State Leases B1-1155-0005; B1-0062-0001 (T.1, T.5 and T.7) and BLM Lease NMNM-0006745 (T.6 on plat.)</u>

Lessee

OXY USA WTP, LP P.O. Box 4294

Houston, TX 77210

Certified: 7018 0360 0001 8569 5111

BLM Leases NMLC-0066156; NMNM-006789; NMLC-0069227 (T.2, T.3 and T.4 on plat.) Lessees

LMBI OG NM, LLC
CTV OG NM, LLC
SRBI OG NM, LLC
THRU LINE OG NM, LLC
KEYSTONE OG NM, LLC
201 Main Street, Ste.2700
Fort Worth, TX 76102
Certified: 7018 0360 0001 8569 5128

BLM Lease NMNM-110831; (T.4 on plat.)

Lessee

CHEVRON USA, INC.
 6301 Deauville Blvd.
 Midland, TX 79706
 Certified: 7018 0360 0001 8569 5135

OFFSET MINERALS OWNER (Notified via USPS Certified Mail)

- U.S. DEPARTMENT OF INTERIOR
 Bureau of Land Management
 Oil & Gas Division
 620 E. Greene St.
 Carlsbad, NM 88220
 Certified: 7018 0360 0001 8569 5142
- 5 STATE OF NEW MEXICO
 Oil, Gas and Minerals Division
 310 Old Santa Fe Trail
 Santa Fe, NM 87504
 Certified: 7018 0360 0001 8569 5159

C-108 ITEM XIII - PROOF OF NOTIFICATION AFFECTED PARTIES LIST (cont.)

REGULATORY

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed original and copy) 1220 S. St. Francis Dr. Santa Fe, NM 87505

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed copy) 811 S. First Street Artesia, NM 88210





October 18, 2018

NOTIFICATION TO INTERESTED PARTIES via U.S. Certified Mail – Return Receipt Requested

To Whom It May Concern:

You recently received notice for this application. Due to a survey error, the well spot was incorrectly reported – it failed to account for the distance across the NENE qtr/qtr. The correction moves the well spot to the west by that distance. This adjustment does not affect any of the project details or affected parties. New legal notice publication is also being made. Thank you for your understanding.

Intrepid Potash - New Mexico, LLC, Denver, Colorado, has made application to the New Mexico Oil Conservation Division to drill and complete for salt water disposal the Intrepid SWD Well No.2. The proposed commercial operation will be for produced water disposal from area operators. As indicated in the notice below, the well is located in Section 2, Township 21 South, Range 31 East in Eddy County, New Mexico.

The published notice states that the maximum interval will be from 13,530 feet to 15,475 feet.

Following is the notice published in the Artesia Daily Press, New Mexico on or about October 19, 2018.

LEGAL NOTICE

Intrepid Potash - New Mexico, LLC, 1001 17TH St., Ste.1050, Denver, CO 80202, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Intrepid SWD No.2, will be located 505.6' FNL and 1474.7' FEL, Section 2, Township 21 South, Range 29 East, Eddy County, New Mexico; approximately 17.5 miles east/northeast of Carlsbad, NM.

Produced water from area production will be commercially disposed into the Devonian, Silurian and Montoya formations at a maximum interval depth of 13,530 feet to 15,475 feet at a maximum surface pressure of 2706 psi and a rate limited only by such pressure. (Note: If the interval is contracted within the maximum depths, surface pressure will be adjusted to the standard gradient of 0.2 psi/ foot X the uppermost interval depth.)

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us.

You have been identified as a party who may be interested as an offset lessee or operator.

You are entitled to a full copy of the application. A full copy in PDF format is posted on the SOS Consulting **ShareFile** site and is available for immediate download.

Use the URL link: https://sosconsulting.sharefile.com/d-s27e92ad56d34f0a8

(Please Note: The ShareFile service is powered by Citrix Systems and is completely secure.*)

The link to this file will be active for 30 days from the date of this letter. Your company can access and download the file a maximum of five (5) times. (One copy may be downloaded and shared as needed amongst your company.)

Alternatively, you may call SOS Consulting, LLC at 903-488-9850, or email info@sosconsulting.us, and the same PDF file copy will be expedited to you via email.

Please use a subject like, "Intrepid SWD Oct2018 PDF Copy Request".

Thank you for your attention in this matter.

Best regards,

Ben Stone, SOS Consulting, LLC Agent for Intrepid Potash NM, LLC

Cc: Application File

SOS Consulting is committed to providing superior quality work using technology to assist clients and affected parties in obtaining the documentation required. SOS will continue to utilize methods which are less energy and resource intensive including, the reduction of paper copies.

We hope you'll partner with us and appreciate these efforts.

* You will be asked for your email, name and company.

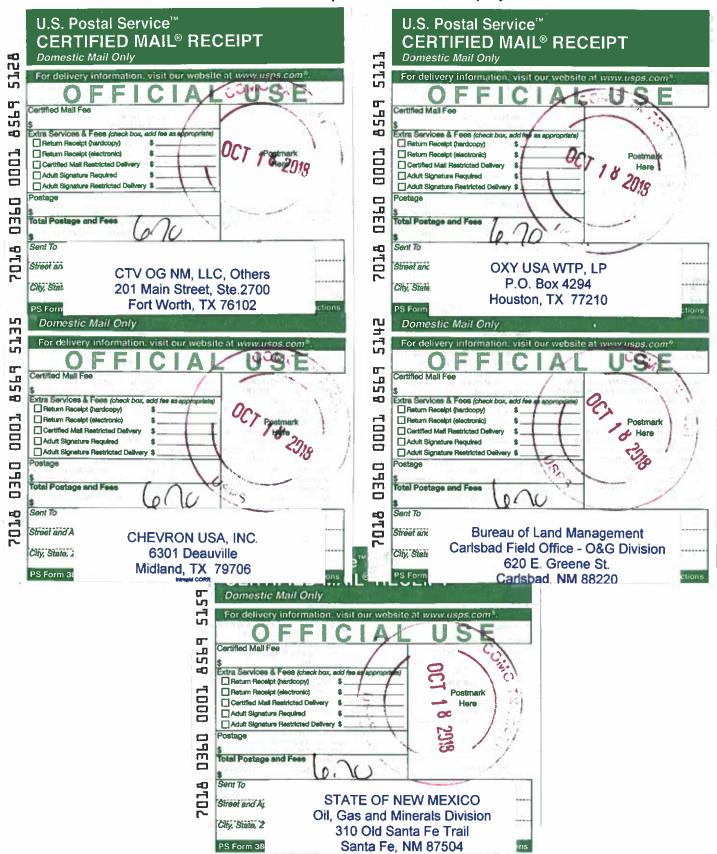
This will not be used by anyone except keeping track of the file downloads.

You will not be solicited by SOS or anyone else. Data is stored on Citrix Systems servers only.



C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)



C-108 - Item XIV

Proof of Notice – Legal Notice Newspaper of General Circulation

Legal Notice

LEGAL NOTICE (Republished for Correction)

Due to a survey error, the well spot was incorrectly reported as 155' FEL. The survey failed to account for the distance across the first qtr/qtr (NENE) – this makes the true spot 1474.7' FEL as follows:

Intrepid Potash - New Mexico, LLC, 1001 17TH St., Ste.1050, Denver, CO 80202, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Intrepid SWD No.2, will be located 505.6' FNL and 1474.7' FEL, Section 2, Township 21 South, Range 29 East, Eddy County, New Mexico; approximately 17.5 miles east/northeast of Carlsbad, NM.

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Published in the Artesia Daily Press, Artesia, N.M., Oct. 21, 2018 Legal No. 24876.

The above is the "Proof Copy" sent from the Artesia Daily Press.

The affidavit of publication will be forwarded as soon as it is received.

McMillan, Michael, EMNRD

From:

McMillan, Michael, EMNRD

Sent:

Tuesday, October 23, 2018 1:18 PM

To:

Ben Stone

Subject:

Intrepid Potash New Mexico, LLC Intrepid SWD #2

Ben:

Your administrative SWD application for the Intrepid Potash New Mexico, LLC Intrepid SWD #2 has been suspended. Your application lacks an affidavit of publication.

In the future, if you know your application is incomplete, please wait to send the OCD an application until all of the required information is in the application.

Mike

Michael McMillan 1220 South St. Francis Santa Fe, New Mexico 505-476-3448 Michael.mcmillan@state.nm.us

McMillan, Michael, EMNRD

From:

ben@sosconsulting.us

Sent:

Tuesday, October 23, 2018 2:07 PM

To:

McMillan, Michael, EMNRD

Subject:

[EXT] RE: Intrepid Potash New Mexico, LLC Intrepid SWD #2

Attachments:

Intrepid#2_AFFIDAVIT.pdf

Here you go Mike - I'll start waiting for these in the future before I submit the app.

Thanks,

Ben

From: McMillan, Michael, EMNRD < Michael. McMillan@state.nm.us>

Sent: Tuesday, October 23, 2018 2:18 PM **To:** Ben Stone
 Sen@sosconsulting.us>

Subject: Intrepid Potash New Mexico, LLC Intrepid SWD #2

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Mike

Michael McMillan 1220 South St. Francis Santa Fe, New Mexico 505-476-3448 Michael.mcmillan@state.nm.us

Affidavit of Publication

No. 24876

State of New Mexico

County of Eddy:

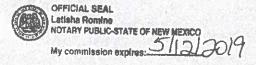
Danny Scott

being duly sworn sayes that he is the Publisher
of the Artesia Daily Press, a daily newspaper of General
circulation, published in English at Artesia, said county
and state, and that the hereto attached

Legal Ad

was published in a regular and entire issue of the said
Artesia Daily Press, a daily newspaper duly qualified
for that purpose within the meaning of Chapter 167 of
the 1937 Session Laws of the state of New Mexico for
Consecutive weeks/day on the same

WELLEY WORLD	
day as follows:	
First Publication	October 21, 2018
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	
Subscribed and sworn bef	ore me this



October

2018

Latisha Romine

22nd

day of

Notary Public, Eddy County, New Mexico

Copy of Publication:

Legal Notice

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