STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Tom Blaine, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

October 18, 2017

Joseph Wiley, Project Manager
El Paso CGP Company, LLC
1001 Louisiana Street, Room 956I
Houston, TX 77002

RE: Permit Approval for Monitoring Wells, SJ-4111 POD18-POD20; El Paso CGP Company, LLC; State Gas Com N#1 Release Investigation; San Juan County, New Mexico

Dear Mr. Wiley:

On October 16, 2017, the New Mexico Office of the State Engineer received an application for a permit for the installation of three new monitoring wells at the above referenced location. Enclosed is a copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page and in the attached Conditions of Approval. A receipt for the fees paid is also attached.

Please be aware that there are deadlines to submit well records for the newly installed monitoring wells. These deadlines can be found in the attached Conditions of Approval. A standardized plugging method has also been included in the Conditions of Approval for the future abandonment of the wells covered by this permit. This eliminates the need to submit a separate Well Plugging Plan of Operations for approval by the NMOSE prior to plugging, unless an alternate plugging method is proposed, required by a separate oversight agency, necessary due to incompatibility with actual conditions, or artesian conditions are encountered. The well completion and plugging records should be sent to the NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 334-4751.

Sincerely,

Blaine Watson

Blaine Watson
District Manager
Water Rights Division – District V

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4111 File
WATERS
Bryan Nydoske, Cascade Drilling, via email: bnydoske@cascade-env.com
Steve Varsa, Stantec, via email: steve.varsa @stantec.com
Brandon Powell, NMOCD District 3, via email: brandon.powell@state.nm.us

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – AZTEC OFFICE

OFFICIAL RECEIPT NUMBER: 5-5920 DATE: 10-16-2017 FILE NO.: SJ-4216, SJ-4011, SJ-4203

TOTAL: 55.00 RECEIVED: fifty-five and no/100 DOLLARS CHECK NO.: 1303 CASH:

PAYOR: S. Varsa ADDRESS: 63179, 270th St. CITY: Nevada STATE: IA

ZIP: 50201 RECEIVED BY: M. Juett

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; **yellow** copy remains in district office, and **goldenrod** copy to accompany application being filed If you make an error, void original and all copies and submit to Program Support/ASD along with other valid receipts.

A. Ground Water Rights Filling Fees

___ 1.	Declaration of Water Right	$ 1.00
___ 2.	Application to Appropriate or Supplement Domestic 72-12-1 Well	$125.00
___ 3.	Application for Stock Well	$ 5.00
___ 4.	Application to Repair or Deepen 72-12-1 Well	$ 75.00
___ 5.	Application for Replacement 72-12-1-1 Well	$ 75.00
___ 6.	Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___ 7.	Application to Appropriate Irrig., Mun., or Comm. Use	$ 25.00
___ 8.	Application for Supplemental Non 72-12-1 Well	$ 25.00
___ 9.	Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___ 10.	Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___ 11.	Application to Change Point of Diversion and Place and/or Purpose of Use	$ 50.00
___ 12.	Application for Extension of Time	$ 25.00
___ 13.	Proof of Application to Beneficial Use	$ 25.00
___ 14.	Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___ 15.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
11 16.	Application for Test, Expl. Observ. Well	~~$ 5.00~~
___ 17.	Change of Ownership of Water Right	$ 2.00
___ 18.	Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
___ 19.	Application for Replacement Well Non 72-12-1 Well	$ 5.00

B. Surface Water Rights Filing Fees

___ 1.	Declaration of Water Right	$ 10.00
___ 2.	Amended Declaration	$ 25.00
___ 3.	Declaration of Livestock Water Impoundment	$ 10.00
___ 4.	Application for Livestock Water Impoundment	$ 10.00
___ 5.	Application to Appropriate	$ 25.00
___ 6.	Notice of Intent to Appropriate	$ 25.00
___ 7.	Application to Change Point of Diversion	$100.00
___ 8.	Application to Change Place and/or Purpose of Use	$100.00
___ 9.	Application to Change Point of Diversion and Place and/or Purpose of Use	$200.00
___ 10.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$200.00
___ 11.	Application for Extension of Time	$ 50.00
___ 12.	Supplemental Well to a Surface Right	$100.00
___ 13.	Return Flow Credit	$100.00
___ 14.	Proof of Completion of Works	$ 25.00
___ 15.	Proof of Application of Water to Beneficial Use	$ 25.00
___ 16.	Water Development Plan	$100.00
___ 17.	Change of Ownership of Water Right	$ 5.00

C. Miscellaneous Fees

___ 1.	Application for Well Driller's License	$ 50.00
___ 2.	Application for Renewal of Well Driller's License	$ 50.00
___ 3.	Application to Amend Well Driller's License	$ 50.00

D. Reproduction of Documents

_____ @ 0.20¢/copy	$_____
_____ Maps(s)	$_____

E. Certification $_____

F. Other $_____

G. Comments:

-2 MWs (MW-9 & MW-10) @ K27 site: SJ-4216

-3 TWs (TW-1, TW-2, TW-3) @ SGC N#1 site: SJ-4011

-6 MWs (MW-13, -14, -15, -16, -17, -18) @ JF Bell #1E site: SJ-4203

(all applications are for El Paso CGP Co. and Cascade Drilling)

All fees are non-refundable

File No. SJ-4111 POD18-POD20

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☒ Temporary Request - Requested Start Date: October 16, 2017 Requested End Date: Unknown

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: El Paso CGP Company, L.L.C.	Name: Cascade Drilling, LP
Contact or Agent: check here if Agent ☐ Joseph Wiley	Contact or Agent: check here if Agent ☐ Bryan Nydoske
Mailing Address: 1001 Louisiana Street, Room 956I	Mailing Address: 3621 Highway 47
City: Houston	City: Peralta
State: Texas Zip Code: 77002	State: New Mexico Zip Code: 87042
Phone: (713) 420-3475 (work) ☐ Home ☐ Cell Phone (Work):	Phone: (505) 991-3578 ☐ Home ☒ Cell Phone (Work):
E-mail (optional): joe_wiley@kindermorgan.com	E-mail (optional): bnydoske@cascade-env.com

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.: SJ-4111 POD18-POD20	Trn. No.:	Receipt No.: 5-5920
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date: 10/17/2018	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ NM State Plane (NAD83) (Feet)
☒ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SJ-4111 POD18 (TW-1)	2646174.798	2147431.667	T31N, R12W, SE/4 NW/4 of Section 16, Unit H
SJ-4111 POD19 (TW-2)	2646201.388	2147380.967	T31N, R12W, SE/4 NW/4 of Section 16, Unit H
SJ-4111 POD20 (TW-3)	2646230.352	2147306.821	T31N, R12W, SE/4 NW/4 of Section 16, Unit H

STATE ENG WELL OFFICE AZTEC, NEW MEXICO 2017 OCT 16 A11:53

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:
State Gas Com N#1 site; NMOSE site SJ-4111.

Well is on land owned by: The State of New Mexico

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ☒ No
If yes, how many_____

Approximate depth of well (feet): 95.00	Outside diameter of well casing (inches): 2.00
Driller Name: Cascade Drilling	Driller License Number: WD-1210

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Three test wells (TW-1, TW-2, and TW-3) will be installed at the site primarily for air sparge testing and groundwater monitoring activities. These test/monitoring wells will be plugged and abandoned once it is determined they are no longer needed, or a no further action determination has been granted by the New Mexico Oil Conservation Division for the release.

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: SJ-4111 POD18-POD20	Trn No.:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application.

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ■ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Joseph Wiley and Bryan Nydoske
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Joseph Wiley
Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2017 OCT 16 AM 11:53

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 18th day of October 20 17, for the State Engineer,

Tom Blaine, P.E., State Engineer

By: Blaine Watson
Signature

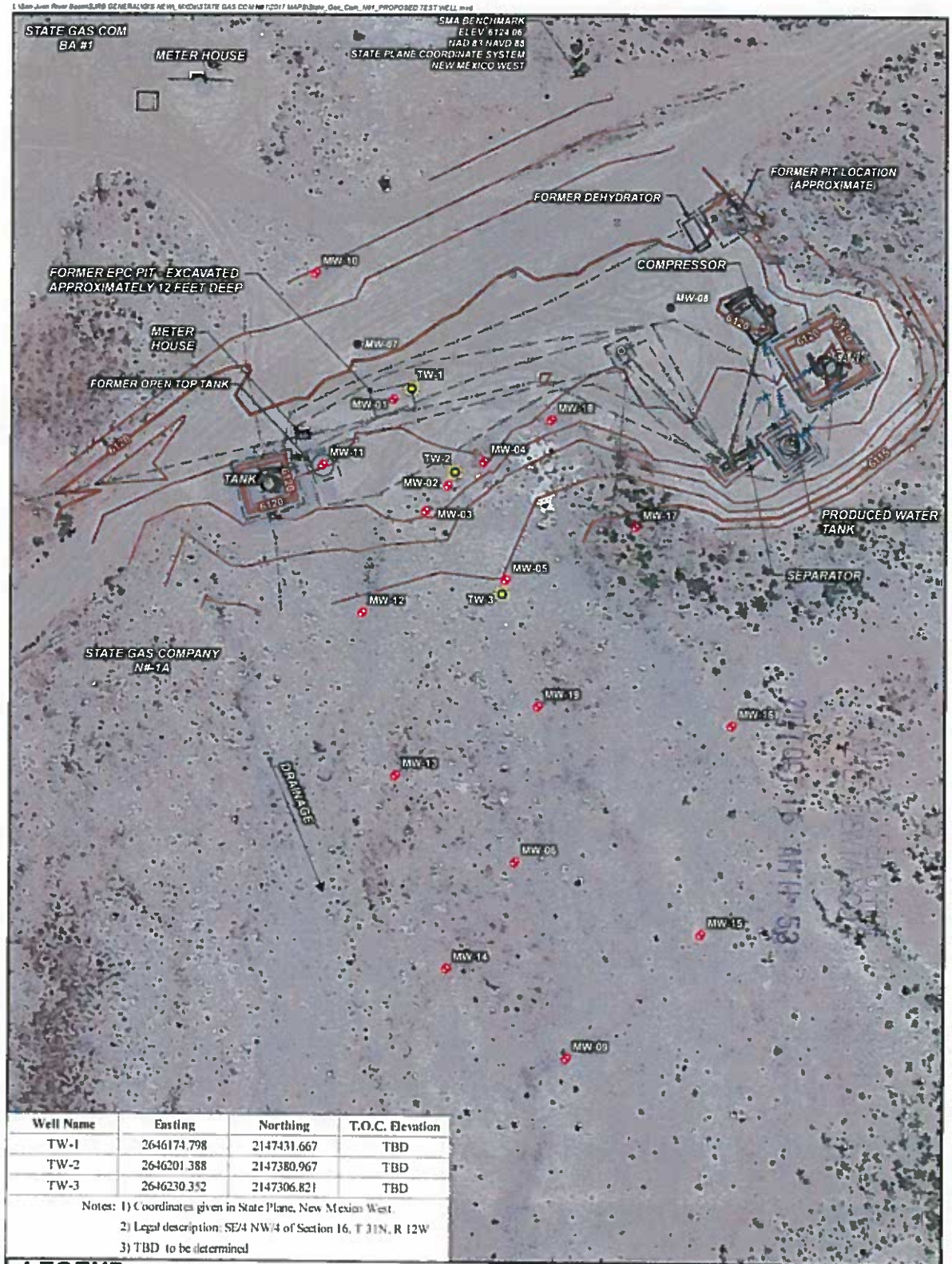
Blaine Watson
Print

Title: District V Manager
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: SJ-4111 POD18-POD20	Trn No.:



Well Name	Easting	Northing	T.O.C. Elevation
TW-1	2646174.798	2147431.667	TBD
TW-2	2646201.388	2147380.967	TBD
TW-3	2646230.352	2147306.821	TBD

Notes: 1) Coordinates given in State Plane, New Mexico West
2) Legal description: SE/4 NW/4 of Section 16, T 31N, R 12W
3) TBD to be determined

LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- FENCE
- NATURAL GAS LINE
- PRODUCED WATER LINE
- UNKNOWN LINE
- UNDERGROUND CABLE
- ABANDONED MONITORING WELL
- MONITORING WELL
- RIG ANCHOR
- SMA BENCHMARK
- WELLHEAD
- PROPOSED TEST WELL

SCALE IN FEET
0 50 100

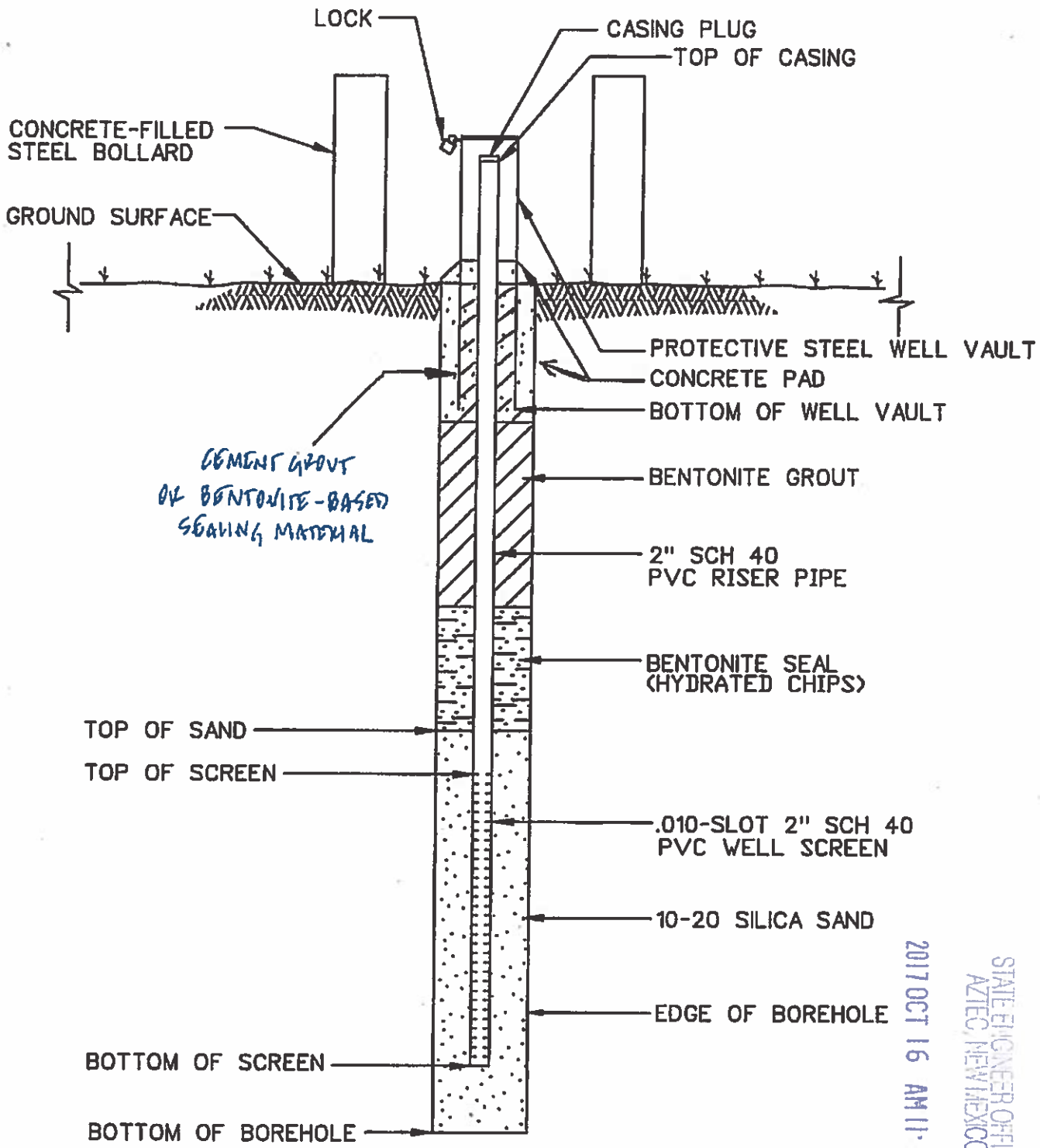
TITLE: PROPOSED TEST WELLS

PROJECT: STATE GAS COM N#1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No 1

Proposed well locations: SJ-4111 POD18-POD20



DESIGNED BY	CHRIS HATT		NOT TO SCALE	TYPICAL MONITORING WELL DETAIL (ABOVE-GRADE)	MWH
DRAWN BY	SCOTT HANSEN				
CHECKED BY	CHRIS HATT				FIGURE 2
APPROVED BY	MIKE ALDRITZ				
PROJECT MANAGER	MIKE ALDRITZ				

Proposed well schematic: SJ-4111 POD18-POD20

NMOSE Permit to Drill a Well(s) With No Water Right and Well Plugging Plan of Operations - Conditions of Approval
SJ-4111 POD18–POD20

The New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s): El Paso CGP Company, LLC
(Steve Varsa, Stantec Consulting Services, as Agent)
1001 Louisiana Street, Room 956I
Houston, TX 77002

and

Cascade Drilling, LP
3621 Highway 47
Peralta, NM 87042

Permit Number: SJ-4111

Application File Date: October 16, 2017

Priority: N/A

Source: Groundwater

Point(s) of Diversion: Three points of diversion (POD), SJ-4111 POD18 through POD20 (Table 1), will be installed. The PODs consist of three new groundwater monitoring wells that will be used for periodic groundwater sampling and for air sparge testing. The wells will all be located at the El Paso CGP State Gas Com N#1 release investigation site, which is on land owned by the State of New Mexico in San Juan County, New Mexico. The PODs will be located within the SE¼ NE¼ of Section 16, Township 31 North, Range 12 West, NMPM, at the following approximate point locations (State Plane, NM West, NAD83).

Table 1: Proposed New Monitoring Wells

POD Name and Owner's Well Identification	X (feet)	Y (feet)
SJ-4111 POD18 (TW-1)	2646174.798	2147431.667
SJ-4111 POD19 (TW-2)	2646201.388	2147380.967
SJ-4111 POD20 (TW-3)	2646231.352	2147306.821

Purpose of Use: Groundwater monitoring and sampling

Place of Use: N/A

Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited.

6. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅜ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

7. The permittee has not stated whether artesian conditions are likely to be encountered at the proposed well/borehole location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection N of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 30 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit. The required Well Record form is available at http://www.ose.state.nm.us/WR/forms.php.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

10. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water

contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 30 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The required Plugging Record form is available at http://www.ose.state.nm.us/WR/forms.php.

11. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater may be immediately plugged by filling with drill cuttings or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a sealant approved by the Office of the State Engineer. A Plugging Record shall be filed with the State Engineer as described above.

12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

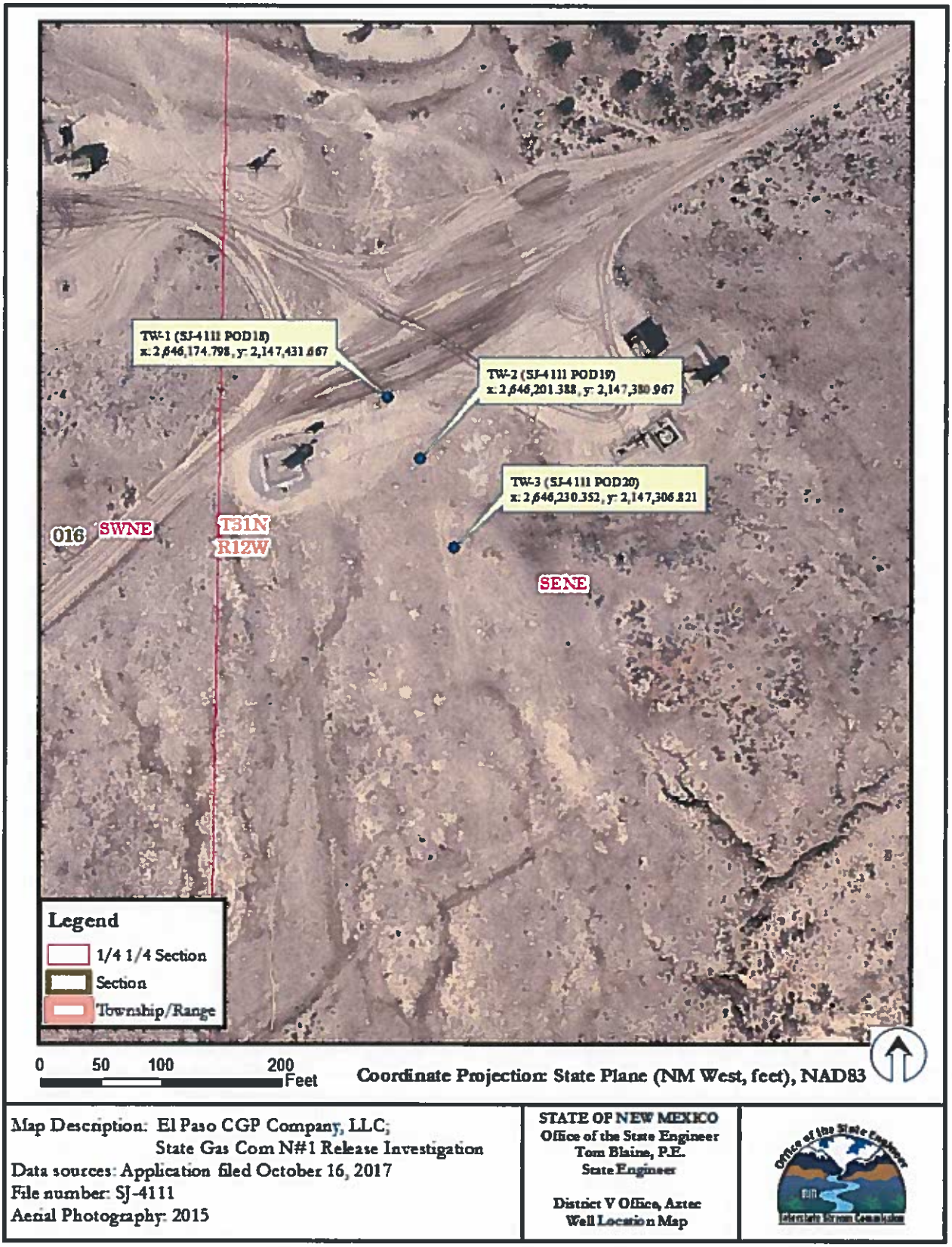
13. Pursuant to 72-12-3 NMSA 1978, the applicant has provided written documentation with the application, which the applicant claims as confirmation that access has been or will be granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

14. The State Engineer retains jurisdiction of this permit.

The application for drilling well(s) SJ-4111 POD18-POD20 without a water right, submitted on October 16, 2017 , is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

Witness my hand and seal this 18th day of October , A.D. 2017 .
Tom Blaine, P.E., State Engineer

By: Blaine Watson
Blaine Watson, Manager
District V Office, Water Rights Division



Map Description: El Paso CGP Company, LLC;
State Gas Com N#1 Release Investigation
Data sources: Application filed October 16, 2017
File number: SJ-4111
Aerial Photography: 2015

STATE OF NEW MEXICO
Office of the State Engineer
Tom Blaine, P.E.
State Engineer

District V Office, Aztec
Well Location Map

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Mike A. Hamman, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

July 13, 2023

El Paso CGP Company, LLC
Attn: Joseph Wiley
1001 Louisiana St, Room 1445B
Houston, TX 77002

RE: Permit Approval to Drill Wells with No Water Right, SJ-4111 POD21-POD25, El Paso CGP Company, LLC, State Gas Com N#1 site, Rural San Juan County, New Mexico

Dear Mr. Wiley:

On June 14, 2023, the New Mexico Office of the State Engineer received an application for a permit for the drilling and use of four proposed groundwater monitoring wells and the advancement of four soil borings for site investigation activities at the above referenced location. Enclosed is a copy of the above numbered permit that has been approved subject to the conditions set forth on the approval pages and in the attached Conditions of Approval. Also enclosed is a receipt for the fees paid.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 383-4571.

Sincerely,

Miles Juett
Watermaster
Water Rights Division – District V Office

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4111 File
WATERS

File No. SJ-4111 POD21-25

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well*(Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.

☒ Temporary Request - Requested Start Date: July 24, 2023	Requested End Date: TBD
Plugging Plan of Operations Submitted? ☐ Yes ☒ No	

1. APPLICANT(S)

Name: El Paso CGP Company, LLC	Name:
Contact or Agent: check here if Agent ☐ Joseph Wiley	Contact or Agent: check here if Agent ☐
Mailing Address: 1001 Louisiana Street, Room 1445B	Mailing Address:
City: Houston	City:
State: Texas Zip Code: 77002	State: Zip Code:
Phone: ☐ Home ☐ Cell Phone (Work): (713) 420-3475	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): joe_wiley@kindermorgan.com	E-mail (optional):

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2023 JUN 14 AM 10:40

FOR OSE INTERNAL USE — Application for Permit, Form WR-07, Rev 07/12/22

File No. SJ-4111 POD21-25	Trn. No.	Receipt No. 5-7277
Trans Description (optional):		
Sub-Basin	PCW/LOG Due Date: 7-13-2023	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range)* OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
(SJ-4111 POD21) SB2 through SB-5	-108.096593	36.901128	SE/4 NE/4 T31N, R12W, ~~SE/4 NW/4~~ of Section 16, Unit H
(POD22) MW-20	-108.096503	36.900268	SE/4 NE/4 T31N, R12W, ~~SE/4 NW/4~~ of Section 16, Unit H
(POD23) MW-21	-108.096856	36.900847	SE/4 NE/4 T31N, R12W, ~~SE/4 NW/4~~ of Section 16, Unit H
(POD24) MW-22	-108.097001	36.901374	SW/4 NE/4 T31N, R12W, ~~SE/4 NW/4~~ of Section 16, Unit H
(POD25) MW 23	-108.096515	36.90145	SE/4 NE/4 T31N, R12W, ~~SE/4 NW/4~~ of Section 16, Unit H

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ **Yes** ■ **No** **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:

Permit SJ-4111. State Gas Com N#1 site.

Well is on land owned by: The State of New Mexico

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ **Yes** ■ **No**
If yes, how many_____

Approximate depth of well (feet): 80	Outside diameter of well casing (inches): 2
Driller Name: Cascade Environmental Drilling	Driller License Number: WD-1664

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Because the New Mexico Oil Conservation Division (NMOCD) requires the delineation of groundwater to applicable NMWQCC standards as a condition for obtaining a No Further Action determination, additional groundwater assessment activities are being completed at this site. Four soil borings (SB-2 through SB-5) and four monitoring wells (MW-20 through MW-23) will be installed. The monitoring wells will be abandoned once a No Further Action determination has been granted by the NMOCD for the release.

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2023 JUN 14 AM 10:40

FOR OSE INTERNAL USE — Application for Permit, Form WR-07 Version 07/12/22

File No.: SJ-4111 POD21-25	Trn No.:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
Is proposed well a future public water supply well? ☐ Yes ☐ NO If Yes, an application must be filed with NMED-DWB, concurrently. ☐ Include a description of the requested pump test if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring ☒ The reason and duration of the monitoring is required.		**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Joseph Wiley
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Joseph Wiley
Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 13 day of July 20 23, for the State Engineer,

Mike A. Hamman, P.E., State Engineer

By: Miles Juett
Signature Print

Title: Watermaster

Print

2023 JUN 14 AM 10 40

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

FOR OSE INTERNAL USE Application for Permit, Form WR-07 Version 07/12/22

File No. SJ-4111 POD21-25	Trn No.:

NMOSE Permit to Drill a Well With No Water Right
SJ-4111 POD21-POD25

Upon review of the application materials, the New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s): El Paso CGP Company, LLC
Attn: Joseph Wiley
1001 Louisiana St, Room 1445B
Houston, TX 77002

Permit Number: SJ-4111

Application File Date: June 14, 2023

Priority: N/A

Source: Groundwater

Point(s) of Diversion: Four new points of diversion (PODs), SJ-4111 POD22-POD25, are proposed to be installed for temporary use to conduct groundwater monitoring activities associated with the El Paso State Gas Com N#1 site investigation (Table 1). The wells will be located on land owned by the State of New Mexico in San Juan County, New Mexico. The PODs will be located within the SE/4 NE/4 of Section 16, Township 31 North, Range 12 West NMPM, at the following approximate point locations (Lat./Long., NAD83; Decimal Degrees). In addition to the four proposed monitoring wells, Soil Borings SB-2 through SB-5 are to be advanced to a depth of approximately 80' BGS. One of the soil borings may be completed as a monitoring well and should be designated as POD21 on the submitted well record and identified accordingly. Soil borings not converted to monitoring wells shall be plugged per Condition 10 below.

Table 1: Proposed Monitoring Wells.

POD Number and Owner's Well Name	Casing: Outside Diameter (inches) and Depth (feet)		Latitude (Degrees N)	Longitude (Degrees W)
SJ-4111 POD 21 (SB-2 thru SB-5)	n/a	80	36.901128	108.096593
SJ-4111 POD 22 (MW-20)	2	80	36.900268	108.096503
SJ-4111 POD 23 (MW-21)	2	80	36.900847	108.096856
SJ-4111 POD 24 (MW-22)	2	80	36.901374	108.097001
SJ-4111 POD 25 (MW-23)	2	80	36.901450	108.096515

Purpose of Use: Groundwater monitoring

Place of Use: N/A

Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited. Based on the proposed well construction information provided regarding the subject well(s), the following variances have been provided from 19.27.4.29 and 19.27.4.30 NMAC.

6. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅜ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

7. The permittee has not stated whether artesian conditions are likely to be encountered at the proposed well/borehole location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection N of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 30 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit. The well record form is available at http://www.ose.state.nm.us/STST/wdForms.php.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

10. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

    a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

    b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

    c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

        Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

    d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 30 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The well plugging record form is available at http://www.ose.state.nm.us/STST/wdForms.php.

11. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater may be immediately plugged by filling with drill cuttings or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a sealant approved by the Office of the State Engineer. A Plugging Record shall be filed with the State Engineer as described above.

12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

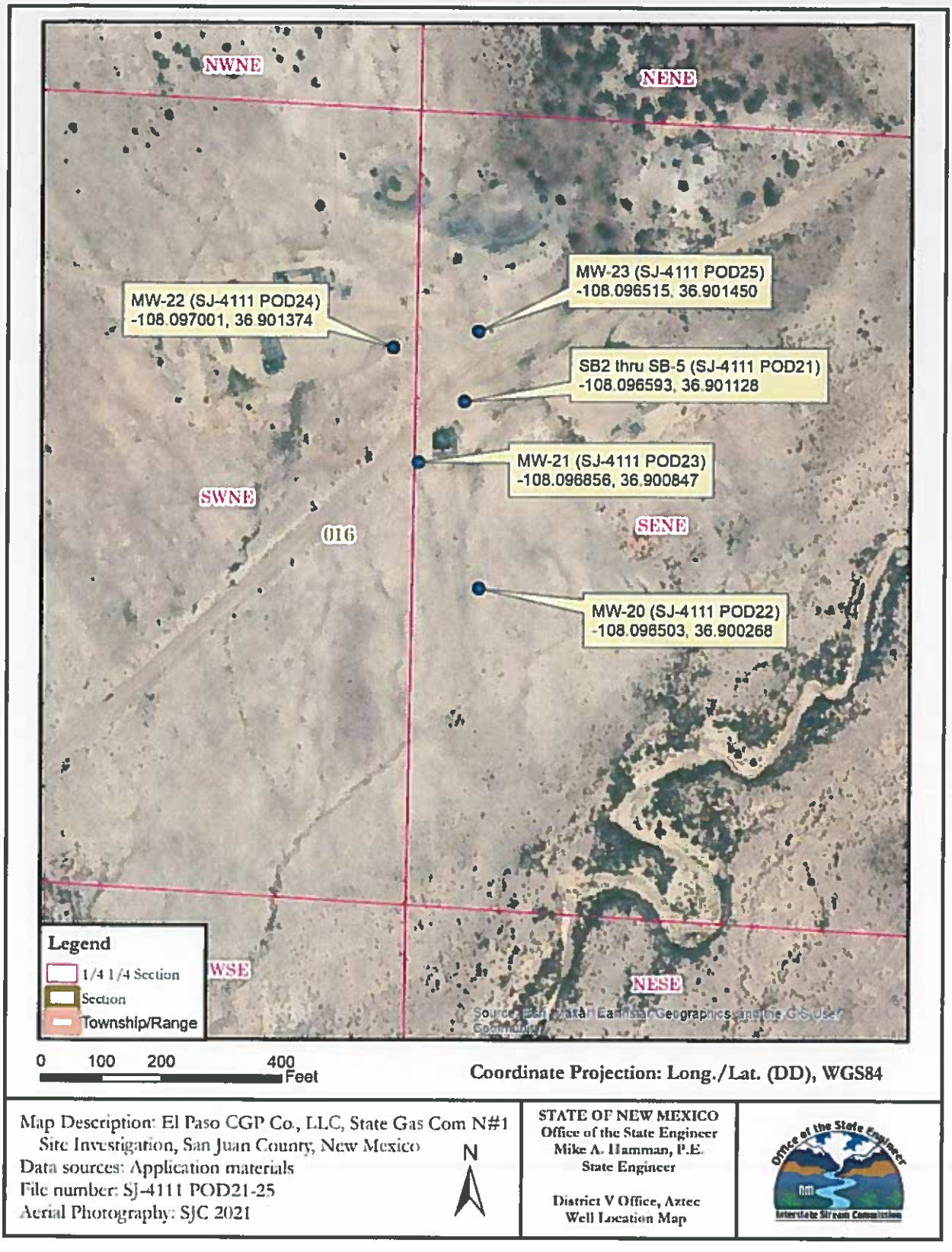
13. Pursuant to 72-12-3 NMSA 1978, the applicant may or may not have provided written documentation which the applicant claims as confirmation that access has been granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

14. The State Engineer retains jurisdiction of this permit.

The application for drilling well(s) SJ-4111 POD21 through POD25 without a water right, submitted on June 14, 2023 , is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

Witness my hand and seal this 13th day of July , A.D. 2023.
Mike A. Hamman, P.E., State Engineer

By: _____
Miles Juett, Watermaster
Water Rights Division District V



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Scott A. Verhines, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

October 2, 2014

Clint Oberbroeckling
MWH Americas, Inc.
11153 Aurora Ave.
Des Moines, IA 50322-7904

RE: Permit Approval for Non-Consumptive Wells, SJ-4111 POD1 – POD17 and Plugging Plan Approval for MW-7, MW-8 and a Soil Boring, El Paso CGP Company, LLC - State Gas Com N#1

Dear Mr. Oberbroeckling:

On September 30, 2014, the New Mexico Office of the State Engineer (NMOSE) received an application for a permit for ten new and seven existing groundwater monitoring wells for the above referenced location. Plugging Plans of Operations were also included for abandonment of two existing and non-permitted monitoring wells (MW-7 and MW-8) and one proposed soil boring. Enclosed are copies of the above numbered permit and plugging plans that have been approved subject to the conditions set forth on the approval pages and in the attached Conditions of Approval. Also enclosed is a receipt for the fees paid.

Please be aware that there are deadlines to submit well records for the newly installed monitoring wells and plugging records for the well to be abandoned. These deadlines can be found in the attached Conditions of Approval in Conditions 8 and 11.i, respectively.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 334-4282.

Sincerely,

Kimberly Kirby
Water Resource Specialist
Water Rights Division – District V

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4111 File
WATERS
Joseph Wiley, Kinder Morgan, Inc., via email: joe_wiley@kindermorgan.com
Bryan Nydoske, National EWP, via email: bnydoske@nationalewp.com

NMOSE Permit to Drill a Non-Consumptive Well(s) - Conditions of Approval
SJ-4111 POD1 – POD17

The New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application is further subject to the following conditions of approval.

1. This application is approved as follows:

Permittee(s): El Paso CGP Company, LLC
(via Clint Oberbroeckling, MWH Americas, Inc. as Agent)
1001 Louisiana St, Room 1310 B
Houston, TX 77002

and

National EWP
3621 Highway 47
Peralta, NM 87042

Permit Number: SJ-4111

Application File Date: September 30, 2014

Priority: N/A

Source: Groundwater

Point(s) of Diversion: SJ-4111 POD1–POD17 includes seven existing and 10 newly proposed groundwater monitoring wells associated with a site investigation at the State Gas Com N#1 release site located on land owned by the State of New Mexico in San Juan County, New Mexico. The PODs are located within the SE/4 NE/4 of Section 16, Township 31 North, Range 12 West, NMPM, at the following approximate point locations (State Plane, NAD83; feet).

Table 1: Monitoring Wells, Existing and Proposed.

POD Name and Owner's Well Identification	X	Y
SJ-4111 POD1 (MW-1) *existing*	2,646,163.654	2,147,425.075
SJ-4111 POD2 (MW-2) *existing*	2,646,196.937	2,147,372.652
SJ-4111 POD3 (MW-3) *existing*	2,646,183.398	2,147,357.144
SJ-4111 POD4 (MW-4) *existing*	2,646,218.919	2,147,387.196
SJ-4111 POD5 (MW-5) *existing*	2,646,232.322	2,147,315.266
SJ-4111 POD6 (MW-6) *existing*	2,646,238.782	2,147,143.269
SJ-4111 POD7 (MW-9) *existing*	2,646,271.190	2,147,023.812

POD Name and Owner's Well Identification	X	Y
SJ-4111 POD8 (MW-10) *proposed*	2,646,116.051	2,147,501.880
SJ-4111 POD9 (MW-11) *proposed*	2,646,120.166	2,147,385.515
SJ-4111 POD10 (MW-12) *proposed*	2,646,145.128	2,147,295.301
SJ-4111 POD11 (MW-13) *proposed*	2,646,165.273	2,147,196.329
SJ-4111 POD12 (MW-14) *proposed*	2,646,196.222	2,147,078.022
SJ-4111 POD13 (MW-15) *proposed*	2,646,352.828	2,147,100.450
SJ-4111 POD14 (MW-16) *proposed*	2,646,370.683	2,147,226.935
SJ-4111 POD15 (MW-17) *proposed*	2,646,311.541	2,147,347.415
SJ-4111 POD16 (MW-18) *proposed*	2,646,259.289	2,147,412.683
SJ-4111 POD17 (MW-19) *proposed*	2,646,251.983	2,147,238.808

Table 2: Existing Monitoring Well (unpermitted) and Soil Boring to be Plugged and Abandoned.

POD Name and Owner's Well Identification	X	Y
MW-7 to be plugged	*2,646,141.132*	*2,147,458.375*
MW-8 to be plugged	*2,646,332.070*	*2,147,481.840*
SB-1 obtain current soil conditions and immediately plug	*2,646,164.869*	*2,147,419.175*

Purpose of Use: Groundwater monitoring

Place of Use: N/A

Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells approved under this permit.

3. No water shall be diverted from the well(s) except for sampling purposes, and upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that

the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited. Based on the proposed well construction information provided regarding the subject well(s), the following variances have been provided from 19.27.4.29 and 19.27.4.30 NMAC.

a. Subsection C of 19.27.4.29 NMAC requires that drilling equipment be disinfected with a chlorine bleach solution. Due to the environmental investigative purpose of these wells, chlorine may bias or degrade contaminates under investigation in the soil and groundwater samples to be collected. Therefore, NMOSE is granting a variance to allow for steam and the use of a suitable cleaning solution for the cleaning of drilling equipment between the drilling of each borehole/well.

b. Paragraph (2) of Subsection A of 19.27.4.30 NMAC requires that for wells completed less than 20 feet below land surface, the seal be placed from land surface to the bottom of the blank casing. However, due to the need for collection of groundwater samples at particular and discrete intervals, and a screened interval that accounts for fluctuations in the water levels, the seal may be placed above the filter pack which may be extended up to two feet above the top of the screened interval.

6. In accordance with 19.27.4 NMAC, any person engaged in the business of well drilling within New Mexico is required to obtain a Well Driller License issued by NMOSE. A New Mexico licensed Well Driller shall drill and/or plug the subject well(s). On-site supervision of well drilling is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor.

7. Based on existing on-site well information it appears unlikely that artesian conditions will be encountered at the proposed well location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection K of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 20 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

10. When the permittee receives approval or direction to permanently abandon the well(s), the District V Office of NMOSE shall be notified and provided with a plugging plan for review, modification as necessary, and approval. Approval of a plugging plan is required

prior to initiation of *any* well plugging activities. The well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC.

11. The September 30, 2014, application also proposes to plug and abandon existing monitoring wells MW-7 and MW-8 and a proposed soil boring (SB-1). Plugging will be performed by National EWP under well driller license WD-1210. The wells/boring shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, the approved Plugging Plans of Operations and the following conditions of approval:

Well Name	Casing – Inside Diameter (inches)	Depth-to-Water (feet)	Total Well Depth (feet)	Theoretical Plugging Volume (gallons)	Proposed Plugging Volume (gallons)
MW-7	2-inch PVC overdrilled 8.25-in auger	~75	85	236	236
MW-8		~75	85	236	236
SB-1	8.25	--	80	222	222

a. No water shall be appropriated and beneficially used from the boring(s) during the time between drilling completion and plugging. Groundwater samples associated with the site investigation may be collected prior to plugging.

b. The Well Plugging Plans submitted propose to completely overdrill the two monitoring wells to remove the two-inch PVC casing, with an 8.25-inch auger, creating a 8.25-inch borehole to be grouted completely from bottom to surface. When re-drilling the well, appropriate methods shall be used to prevent deviation from the original casing and borehole. The soil boring is proposed to be drilled using an 8.25-inch auger and be grouted completely from bottom to surface immediately following completion.

c. Obstructions in the well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

d. The theoretical volume of sealant required for abandonment of a 8.25-inch borehole is approximately 2.78 gallons per linear foot of casing. The theoretical volume of sealant required for abandonment of each well casing shall be determined prior to plugging. The total minimum volume of sealant shall be calculated based on the actual measured pluggable depth of the well and the volume factor for the casing diameter. The volume of sealing material placed in the well shall be compared with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

e. The Well Plugging Plan of Operations submitted proposes the use of Portland Type I/II cement as the plugging sealant. The water mixed with the cement to create the plugging grout shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. The mix rate proposed in the plan is approximately 5.8 gallons of water per 94-lb sack of cement. If necessary for pumpability, the use of a slightly higher amount of cement mixing water is acceptable as long as it remains at or below the six gallons per 94-lb sack limit allowed by NMOSE.

   This plugging plan also proposes the addition of 5% bentonite powder to the Portland cement slurry. Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of six gallons of water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

f. Placement of the sealant within the well(s) shall be by pumping through a tremie pipe extended to near the bottom of the well and kept below the top of the slurry column (i.e., immersed in the slurry) as the well is plugged from bottom upwards in a manner that displaces the standing water column.

g. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface maybe filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

h. Witnessing of the plugging work by NMOSE will not be required, but shall be facilitated if an NMOSE observer is onsite. NMOSE witnessing may be requested during normal work hours by calling the NMOSE - District V Office at (505) 334-4571, at least 48 hours in advance. NMOSE inspection will occur depending on personnel availability.

i. **Within 20 days after completion of well plugging, a complete well Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well plugged. The Well Plugging

Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The required well plugging record form is available at http://www.ose.state.nm.us/PDF/WellDrillers/WD-11.pdf.

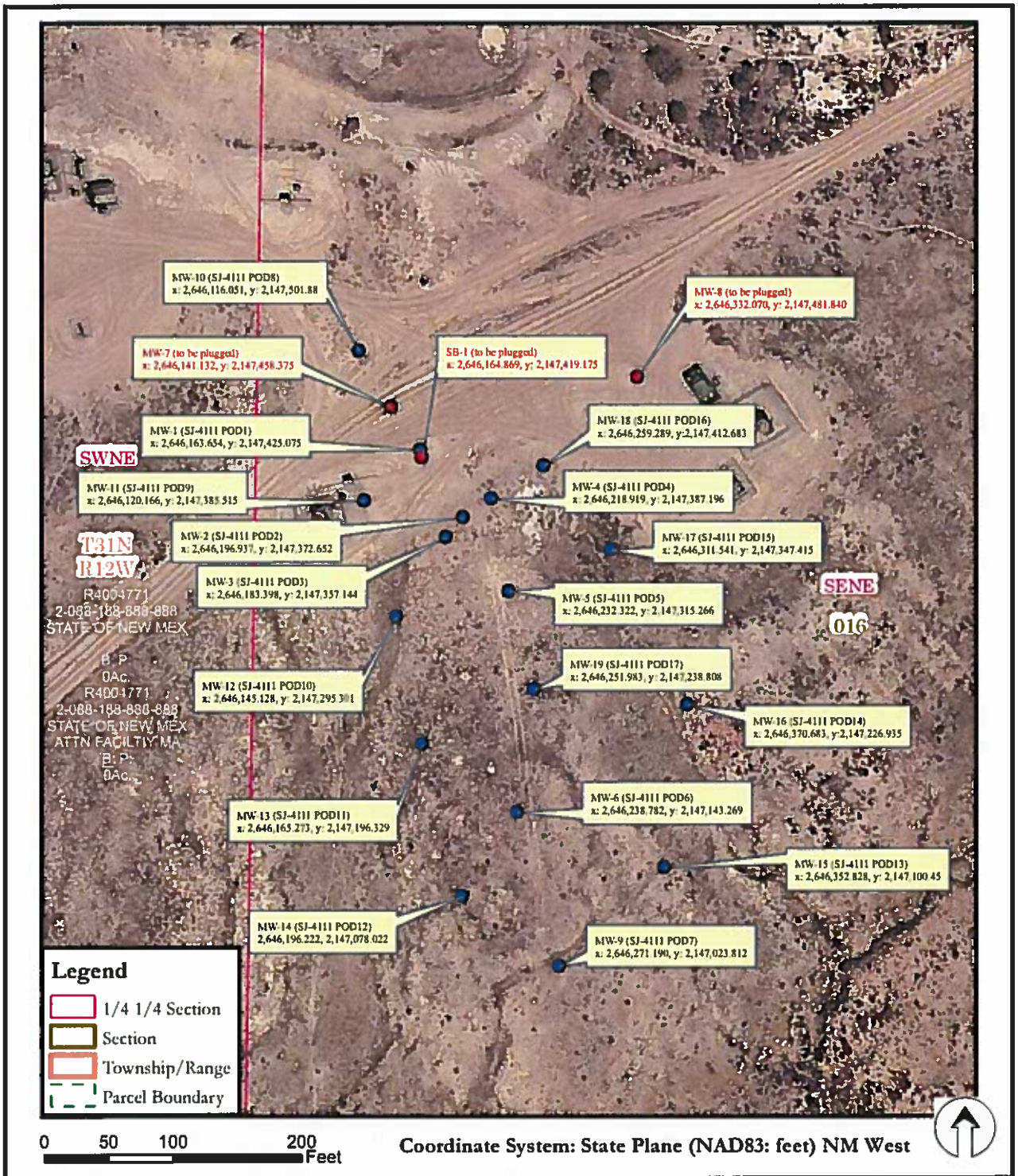
12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

13. The State Engineer retains jurisdiction of this permit.

The application for non-consumptive use for well(s) SJ-4111 POD1–POD17, submitted on September 30, 2014, including plugging plans, is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

Witness my hand and seal this 2nd day of October, A.D. 2014.
Scott A. Verhines, P.E., State Engineer

By: _____
Kimberly D. Kirby, Water Resource Specialist
District V, Water Rights Division



Map Description: El Paso CGP Co., State Gas Com N#1
Groundwater Site Investigation Monitoring Wells
Data sources: Application for a Permit
File number: SJ-4111
Aerial Photography: 2013

STATE OF NEW MEXICO
Office of the State Engineer
Scott A. Verhines, P.E.
State Engineer

Aztec District Office
Well Location Map

File No. SJ-4111 POD1- POD17

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:

- ☐ Pollution Control And / Or Recovery
- ☐ Geo-Thermal
- ☐ Exploratory
- ☐ Construction Site De-Watering
- ☐ Other (Describe):
- ☒ Monitoring
- ☐ Mineral De-Watering

A separate permit will be required to apply water to beneficial use.

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2014 SEP 30 AM 10: 28

☐ Temporary Request - Requested Start Date: **10/20/14** Requested End Date: **Unknown**

Plugging Plan of Operations Submitted? ☒ Yes ☐ No

OSE Notation: Plugging Plan is only for non-permitted wells MW-7, MW-8 and SB-1

1. APPLICANT(S)

Name: **El Paso CGP Company, L.L.C.**	Name: **National EWP**
Contact or Agent: **Clint Oberbroeckling (MWH Americas, Inc.)** check here if Agent ☒	Contact or Agent: **Bryan Nydoske** check here if Agent ☐
Mailing Address: **1001 Louisiana Street, Room 1310B**	Mailing Address: **3621 Highway 47**
City: **Houston**	City: **Peralta**
State: **TX** Zip Code: **77002**	State: **NM** Zip Code: **87042**
Phone: **515-210-4299** ☐ Home ☒ Cell Phone (Work): **515-253-0830**	Phone: **505-991-3578** ☐ Home ☒ Cell Phone (Work): **505-865-5222**
E-mail (optional): **clint.oberbroeckling@mwhglobal.com**	E-mail (optional): **bnydoske@nationalewp.com**

FOR OSE INTERNAL USE — Application for Permit, Form wr-07, Rev 4/12/12

File Number: SJ-4111 POD1-POD17	Trn Number:
Trans Description (optional):	
Sub-Basin:	
PCW/LOG Due Date: October 2, 2015	

2. **WELL(S)** Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ NM State Plane (NAD83) (Feet)
☒ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
MW-1 (SJ-4111 POD1)	2646163.654	2147425.075	T. 31N, R. 12W, Sec. 16
MW-2 (SJ-4111 POD2)	2646196.937	2147372.652	T. 31N, R. 12W, Sec. 16
MW-3 (SJ-4111 POD3)	2646183.398	2147357.144	T. 31N, R. 12W, Sec. 16
MW-4 (SJ-4111 POD4)	2646218.919	2147387.196	T. 31N, R. 12W, Sec. 16
MW-5 (SJ-4111 POD5)	2646232.322	2147315.266	T. 31N, R. 12W, Sec. 16

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2014 SEP 30 AM 10:29

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☒ Yes ☐ No **If yes, how many** 15

Other description relating well to common landmarks, streets, or other: **State Gas COM N #1**

Well is on land owned by: **State Of New Mexico**

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☒ Yes ☐ No
If yes, how many 9 well logs for existing wells

Approximate depth of well (feet): **85.00**	Outside diameter of well casing (inches): **2.00**
Driller Name: **Brian Nydoske**	Driller License Number: **WD-1210**

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

Nine monitoring wells (MW-1 through MW-9) exist at the site. Ten additional monitoring wells (MW-10 through MW-19) are proposed to be installed. Soil boring (SB-1) is proposed to be advanced. Monitoring wells MW-7, MW-8, and boring SB-1 will be plugged and abandoned.

Groundwater monitoring wells are being installed to provide further delineation of groundwater impacts and to establish the groundwater gradient in order to move the site toward closure. Groundwater will be sampled from the wells twice each year until site closure. Sampling will be performed with minimal removal of water. The wells will be abandoned according to State of New Mexico regulations once a no furthur action determination has been granted by the NMOCD.

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File Number: SJ-4111 POD1-POD17	Trn Number:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory: ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☒ Include the reason for the monitoring well, and, ☒ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Geo-Thermal:** ☐ Include a description of the geothermal heat exchange project, ☐ The amount of water to be diverted and re-injected for the project, ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)). **Clint Oberbroeckling and Bryan Nydoske**
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2014 SEP 30 AM 10: 29

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 2nd day of October 20 14, for the State Engineer,

Scott A. Verhines, PE, State Engineer

By: _____ Kimberly Kirby
Signature Print

Title: Water Resource Specialist, Water Rights Division, District V
Print

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File Number: SJ-4111 POD1-POD17	Trn Number:

NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a: ☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	**b. Information on Attachment(s):** Number of points of diversion involved in the application: **19** Total number of pages attached to the application: **2**

☐ **Surface Point of Diversion**	**OR**	☒ **Well**
Name of ditch, acequia, or spring:		**Na**
Stream or water course:		**Na**
Tributary of:		**Na**

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), **or** Lat/Long (WGS84)

NM State Plane (NAD83) (feet) NM West Zone ☒ NM Central Zone ☐ NM East Zone ☐	UTM (NAD83) (meters) Zone 13N ☐ Zone 12N ☐	☐ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format) ☒ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant
POD Number: **MW-6** (SJ-4111 POD6)	X or Longitude **2646238.782** Y or Latitude **2147143.269**		Other Location Description: Sec. 16 T31N R12W
POD Number: **MW-7** (to be plugged)	X or Longitude **2646141.132** Y or Latitude **2147458.375**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-8** (to be plugged)	X or Longitude **2646332.070** Y or Latitude **2147481.840**		Other Location Description: Sec. 16 T31N R12W
POD Number: **MW-9** (SJ-4111 POD7)	X or Longitude **2646271.19** Y or Latitude **2147023.812**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-10** (SJ-4111 POD8)	X or Longitude **2646116.051** Y or Latitude **2147501.880**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-11** (SJ-4111 POD9)	X or Longitude **2646120.166** Y or Latitude **2147385.515**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-12** (SJ-4111 POD10)	X or Longitude **2646145.128** Y or Latitude **2147295.301**		Other Location Description: Sec.16 T31N R12W
POD Number: MW-13 (SJ-4111 POD11)	X or Longitude **2646165.273** Y or Latitude **2147196.329**		Other Location Description: Sec.16 T31N R12W
POD Number: MW-14 (SJ-4111 POD12)	X or Longitude **2646196.222** Y or Latitude **2147078.022**		Other Location Description: Sec.16 T31N R12W

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2014 SEP 30 AM 10: 29

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: SJ-4111 POD1-POD17	Trn Number:
Trans Description (optional):	

NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a: ☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	**b. Information on Attachment(s):** Number of points of diversion involved in the application: **19** Total number of pages attached to the application: **2**

☐ **Surface Point of Diversion** OR	☒ **Well**
Name of ditch, acequia, or spring:	**Na**
Stream or water course:	**Na**
Tributary of:	**Na**

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)

NM State Plane (NAD83) (feet) NM West Zone ☒ NM Central Zone ☐ NM East Zone ☐	UTM (NAD83) (meters) Zone 13N ☐ Zone 12N ☐	☐ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format) ☒ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant
POD Number: **MW-15** (SJ-4111 POD13)	X or Longitude **2646352.828** Y or Latitude **2147100.450**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-16** (SJ-4111 POD14)	X or Longitude **2646370.683** Y or Latitude **2147226.935**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-17** (SJ-4111 POD15)	X or Longitude ~~**2646370.683**~~ 2646311.541 Y or Latitude **2147347.415** location verified by email 10/2/14		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-18** (SJ-4111 POD16)	X or Longitude **2646259.289** Y or Latitude **2147412.683**		Other Location Description: Sec.16 T31N R12W
POD Number: **MW-19** (SJ-4111 POD17)	X or Longitude **2646251.983** Y or Latitude **2147238.808**		Other Location Description: Sec.16 T31N R12W
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:
POD Number:	X or Longitude Y or Latitude		Other Location Description:

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2014 SEP 30 AM 10:29

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: SJ-4111 POD1- POD17	Trn Number:
Trans Description (optional):	

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. **FILING FEE:** There is no filing fee for this form.

II. **GENERAL / WELL OWNERSHIP:**

Existing Office of the State Engineer POD Numbers (Well Numbers) for wells to be plugged: Monitoring well IDs are MW-7 and MW-8. The POD numbers are unknown.

OSE Notation: Assoicated with SJ-4111, but not assigned OSE POD #.

Name of well owner: El Paso CGP Company, LLC

Mailing address: 1001 Louisiana Street, Room 1310B

City: Houston State: TX Zip code: 77002

Phone number: 713-420-3475 E-mail: joe_wiley@kindermorgan.com

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
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III. **WELL DRILLER INFORMATION:**

Well Driller contracted to provide plugging services: National EWP

New Mexico Well Driller License No.: WD-1210 Expiration Date: 10/31/2015

IV. **WELL INFORMATION:**

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

1) MW-7 GPS Well Location:
Latitude: 36 deg. 54.071 min.
Longitude: 108 deg. 05.792 min.
MW-8 GPS Well Location:
Latitude: 36 deg. 54.072 min.
Longitude: 108 deg. 05.751 min.

Location provided in applicaiton
State Plan NAD83 Feet, NM West
x: 2646141.132
y: 2147458.375
x: 2646332.070
y: 2147481.840

2) Reason(s) for plugging well(s): Monitoring wells MW-7 and MW-8 are damaged and no longer viable sampling locations.

3) Was well used for any type of monitoring program? Yes. If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? No. If yes, provide additional detail, including analytical results and/or laboratory report(s): _____

5) Static water level: ~75 feet below land surface/feet above land surface (circle one)

6) Depth of the well: Approximately 85 feet. Inside diameter of innermost casing: 2.067 inches.

7) Casing material: 2-inch PVC

8) The well was constructed with:

_____ an open-hole production interval, state the open interval: _____

__X__ a well screen or perforated pipe, state the screened interval(s): Approximately 85 feet to 65 feet bgs.

9) What annular interval surrounding the artesian casing of this well is cement-grouted? Not Applicable.

10) Was the well built with surface casing? No. If yes, is the annulus surrounding the surface casing grouted or otherwise sealed?_____If yes, please describe: _____

11) Has all pumping equipment and associated piping been removed from the well? Yes. If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well: The monitoring wells are non-artesian and will be plugged with cement/bentonite grout mix from total depth to grade. The well will be overdrilled with 8.25-inch OD augers and each borehole filled with approximately 236 gallons of cement/bentonite mix delivered by tremmie pipe.

OSE Notation: above information applies to each well.

2) Will well head be cut-off below land surface after plugging? The entire well casing will be drilled out or pulled.

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: For an 8.25'' borehole, 236 gallons

4) Type of Cement proposed: Type I/II Portland Cement/Bentonite Grout mix. The bentonite will be hydrated and mixed separately.

5) Proposed cement grout mix: 5.8 gallons of water per 94 pound sack of Portland cement.

6) Will the grout be:_____ batch-mixed and delivered to the site

__X__ mixed on site

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STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

7) Grout additives requested, and percent by dry weight relative to cement: 5 % bentonite powder will be added to the cement with 0.65 gallons water per 1%.

8) Additional notes and calculations: Bentonite will be hydrated and mixed separately with 00.65 gallons water per1%.

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

The wells to be plugged are part of a groundwater monitoring network at the site for the analysis of petroleum constituents (BTEX) in groundwater under the New Mexico Oil Conservation Division.

VIII. SIGNATURE:

I, Bryan Nydoske, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant — Date: 9/29/14

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

X Approved subject to the attached conditions.
_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 2nd day of October, 2014

Scott A. Verhines, State Engineer

By: _____
Kimberly Kirby, Water Resource Spec.
Water Rights Division District V

2014 SEP 30 AM 10:29

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			Ground surface/grade.
Bottom of proposed interval of grout placement (ft bgl)			The total depth of the well (~85-feet)' bgs.
Theoretical volume of grout required per interval (gallons)			Approximately 236 gallons.
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			5.8 gallons of water per 94-pound sack.
Mixed on-site or batch-mixed and delivered?			Mixed on-site.
Grout additive 1 requested			Bentonite powder.
Additive 1 percent by dry weight relative to cement			5%
Grout additive 2 requested			na
Additive 2 percent by dry weight relative to cement			na

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			
Bottom of proposed sealant of grout placement (ft bgl)			
Theoretical volume of sealant required per interval (gallons)			
Proposed abandonment sealant (manufacturer and trade name)			

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. **FILING FEE:** There is no filing fee for this form.

II. **GENERAL / WELL OWNERSHIP:**

Existing Office of the State Engineer POD Numbers (Well Numbers) for wells to be plugged: Soil Boring ID is SB-1. The POD number is not issued.

OSE Notation: Associated with SJ-4111, but not assigned an OSE POD #.

Name of well owner: El Paso CGP Company, LLC

Mailing address: 1001 Louisiana Street, Room 1310B

City: Houston State: TX Zip code: 77002

Phone number: 713-420-3475 E-mail: joe_wiley@kindermorgan.com

III. **WELL DRILLER INFORMATION:**

Well Driller contracted to provide plugging services: National EWP

New Mexico Well Driller License No.: WD-1210 Expiration Date: 10/31/2015

IV. **WELL INFORMATION:**

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

1) SB-1 GPS Well Location:
Latitude: 36 deg. 54 min. 03.9 sec.
Longitude: 108 deg. 05 min. 47.2 sec.

Location on sitemap provided with application given in State Plane NAD83 Feet, NM West
x: 2646164.869
y: 2147419.175

2) Reason(s) for plugging well(s): SB-1 is a soil boring (to~75 to 80 feet) to identify current conditions in the original suspected source area. As a well (MW-1) already exists at the location, the boring will be plugged after completion

3) Was well used for any type of monitoring program? Not Applicable. If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? Not Applicable. If yes, provide additional detail, including analytical results and/or laboratory report(s): _____

5) Static water level: ~75 feet below land surface/feet above land surface (circle one)

6) Depth of the boring: Approximately 75-80 feet for total boring depth (slightly below groundwater elevation). Inside diameter of innermost casing: Not Applicable inches.

7) Casing material: Not Applicable.

8) The well was constructed with: Not Applicable.

_____ an open-hole production interval, state the open interval: _____

_____ a well screen or perforated pipe, state the screened interval(s):

9) What annular interval surrounding the artesian casing of this well is cement-grouted? Not Applicable.

10) Was the well built with surface casing? Not Applicable. If yes, is the annulus surrounding the surface casing grouted or otherwise sealed?_____If yes, please describe: _____

11) Has all pumping equipment and associated piping been removed from the well? Yes. If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well: Based on experience at the site, the borehole will not be artesian. The soil boring will be plugged with cement/bentonite grout mix from TD to grade. The borehole will be filled with approximately 222 gallons of cement/bentonite mix delivered by tremmie pipe.

2) Will well head be cut-off below land surface after plugging? Not Applicable.

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: For an 8.25'' borehole, 222 gallons

4) Type of Cement proposed: Type I/II Portland Cement/Bentonite Grout mix. The bentonite will be hydrated and mixed separately.

5) Proposed cement grout mix: 5.8 gallons of water per 94 pound sack of Portland cement.

6) Will the grout be:_____ batch-mixed and delivered to the site

__X__ mixed on site

7) Grout additives requested, and percent by dry weight relative to cement: 5 % bentonite powder will be added to the cement with 0.65 gallons water per 1%.

8) Additional notes and calculations: Bentonite will be hydrated and mixed separately with 0.65 gallons water per1%.

VII. **ADDITIONAL INFORMATION:** List additional information below, or on separate sheet(s):

The wells to be plugged are part of a groundwater monitoring network at the site for the analysis of petroleum constituents (BTEX) in groundwater under the New Mexico Oil Conservation Division.

VIII. **SIGNATURE:**

I, Bryan Nydaske, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant — Date: 9/29/14

IX. **ACTION OF THE STATE ENGINEER:**

This Well Plugging Plan of Operations is:

__x__ Approved subject to the attached conditions.
_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 2nd day of October, 2014

Scott A. Verhines, State Engineer

By: _____
Kimberly Kirby, Water Resource Spec.
Water Rights Division District V

2014 SEP 30 AM 10: 30

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			Ground surface/grade.
Bottom of proposed interval of grout placement (ft bgl)			The total depth of the boring (~80-feet)' bgs.
Theoretical volume of grout required per interval (gallons)			Approximately 222 gallons.
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			5.8 gallons of water per 94-pound sack.
Mixed on-site or batch-mixed and delivered?			Mixed on-site.
Grout additive 1 requested			Bentonite powder.
Additive 1 percent by dry weight relative to cement			5%
Grout additive 2 requested			na
Additive 2 percent by dry weight relative to cement			na

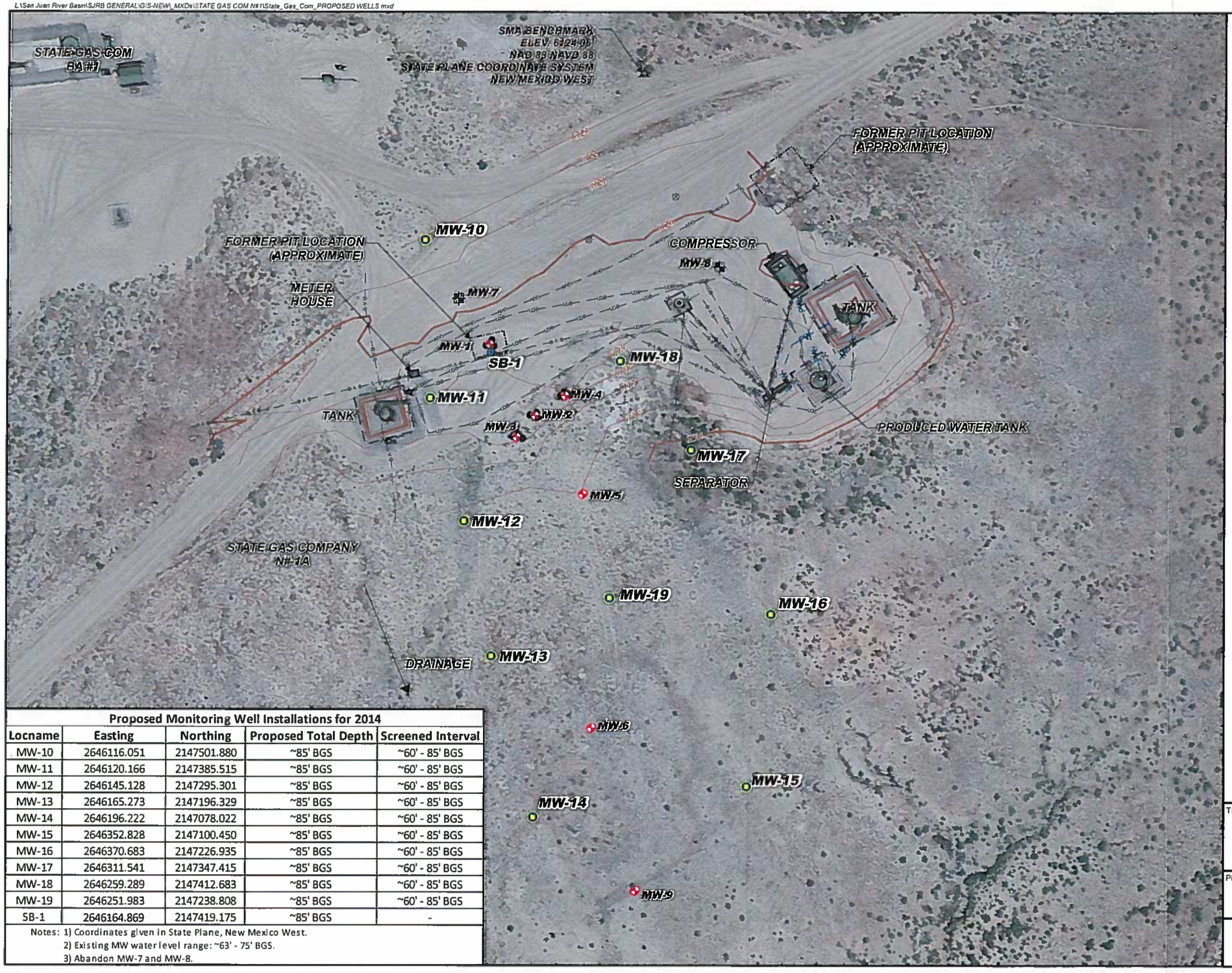
TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			
Bottom of proposed sealant of grout placement (ft bgl)			
Theoretical volume of sealant required per interval (gallons)			
Proposed abandonment sealant (manufacturer and trade name)			

ATTACHMENT A

MWH

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\STATE GAS COM N#1\State_Gas_Com_PROPOSED WELLS.mxd



Proposed Monitoring Well Installations for 2014				
Locname	Easting	Northing	Proposed Total Depth	Screened Interval
MW-10	2646116.051	2147501.880	~85' BGS	~60' - 85' BGS
MW-11	2646120.166	2147385.515	~85' BGS	~60' - 85' BGS
MW-12	2646145.128	2147295.301	~85' BGS	~60' - 85' BGS
MW-13	2646165.273	2147196.329	~85' BGS	~60' - 85' BGS
MW-14	2646196.222	2147078.022	~85' BGS	~60' - 85' BGS
MW-15	2646352.828	2147100.450	~85' BGS	~60' - 85' BGS
MW-16	2646370.683	2147226.935	~85' BGS	~60' - 85' BGS
MW-17	2646311.541	2147347.415	~85' BGS	~60' - 85' BGS
MW-18	2646259.289	2147412.683	~85' BGS	~60' - 85' BGS
MW-19	2646251.983	2147238.808	~85' BGS	~60' - 85' BGS
SB-1	2646164.869	2147419.175	~85' BGS	-

Notes: 1) Coordinates given in State Plane, New Mexico West.
2) Existing MW water level range: ~63' - 75' BGS.
3) Abandon MW-7 and MW-8.

LEGEND:

- 6420 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- FENCE
- GAS — NATURAL GAS LINE
- PW — PRODUCED WATER LINE
- UKN — UNKNOWN LINE
- UDC — UNDERGROUND CABLE
- MONITORING WELL
- DAMAGED MONITORING WELL
- RIG ANCHOR
- SMA BENCHMARK
- PROPOSED GROUNDWATER MONITORING WELL LOCATIONS
- PROPOSED SOIL BORING LOCATION

SCALE IN FEET
0 70 140

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	8/29/2014	CCL	CCL	Date

TITLE: **STATE GAS COM N#1 PROPOSED GROUNDWATER MONITORING WELL LOCATIONS**

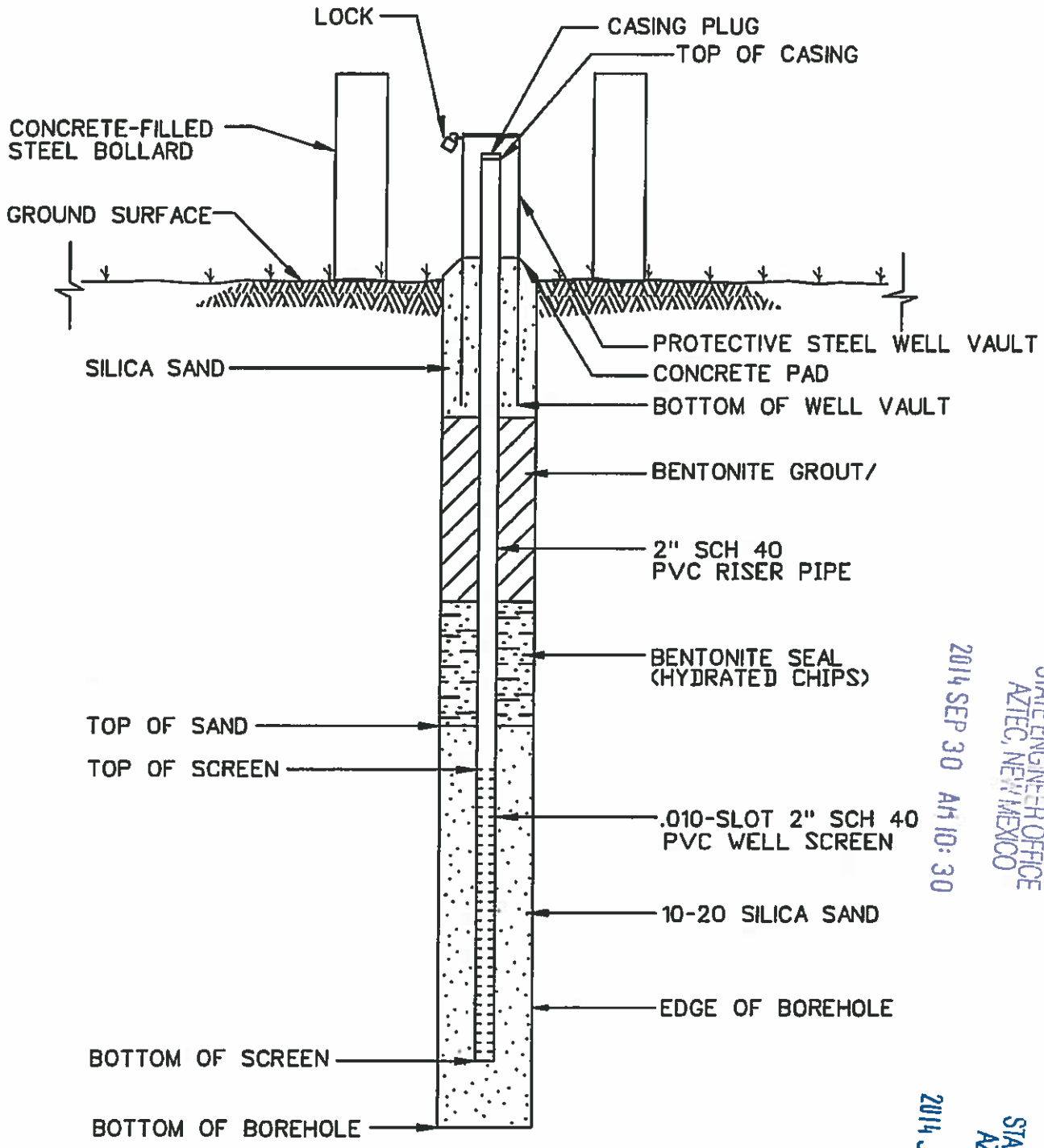
PROJECT: **SAN JUAN RIVER BASIN MONITORING AND REMEDIATION SAN JUAN COUNTY, NEW MEXICO**

MWH

Figure No.: 1

ATTACHMENT B

MWH



DESIGNED BY	CHRIS HATT	
DRAWN BY	SCOTT HANSEN	
CHECKED BY	CHRIS HATT	
APPROVED BY	MIKE ALCHITZ	
PROJECT MANAGER	MIKE ALCHITZ	

NOT TO SCALE

TITLE: TYPICAL MONITORING WELL DETAIL (ABOVE-GRADE)

MWH

FIGURE: 2

ATTACHMENT C

MWH

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1
Well # MW-1
Page 1 of 1

Project Name EPNG Pits
Project Number 14509 Phase 6001
Project Location State Gas Com N#1
71669

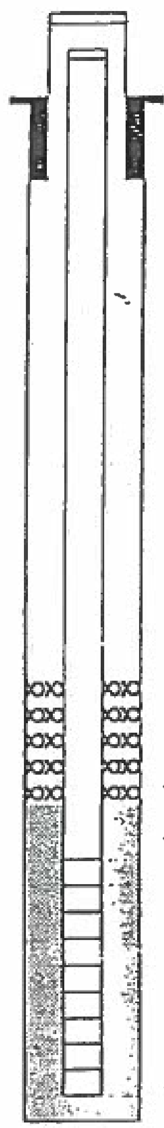
On-Site Geologist
Personnel On-Site M. Donohue, J. Long
Contractors On-Site
Client Personnel On-Site

Elevation
Well Location T31 R12 S16 H
GWL Depth 75.0'
Installed By M. Donohue

Date/Time Started 10/12/05 0830
Date/Time Completed 10/12/05, 1700

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		0.0
Bottom of Grout		-66.5
Top of Well Riser		+2.6
Bottom of Well Riser		-71.0
Top of Well Screen		-71.0
Bottom of Well Screen		-81.0
Top of Peltonite Seal		-66.5
Bottom of Peltonite Seal		-69.0
Top of Gravel Pack		-69.0
Bottom of Gravel Pack		-81.0
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		-75.0'
Total Depth of Borehole		-81.0



Top of Protective Casing N/A
Top of Riser +2.6'
Ground Surface 0.0
Top of Seal -66.5'
Top of Gravel Pack -69.0
Top of Screen -71.0
Bottom of Screen -81.0
Bottom of Borehole -81.0

Comments:

Geologist Signature

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # ______
Well # MW-7
Page 1 of 1

Project Name: EPNG Pits
Project Number: 14509 Phase 6000
Project Location: State Gas Com N #1 (71645)

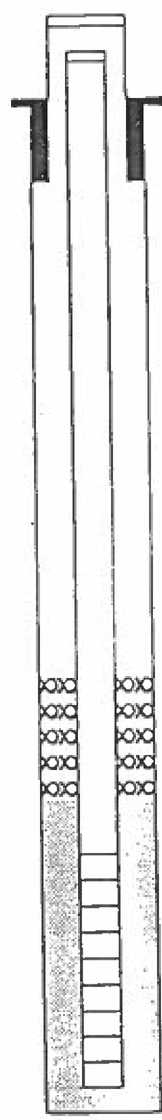
On-Site Geologist: S. Pope
Personnel On-Site: M. Donahue, J. Long
Contractors On-Site: N/A
Client Personnel On-Site: N/A

Elevation: ______
Well Location: T31, R12, S16, H
GWL Depth: 73.0
Installed By: M. Donahue

Date/Time Started: 1500 11/27/95
Date/Time Completed: 1130 11/28/95

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout	Cement/Bentonite	1.0
Bottom of Grout		61.0
Top of Well Riser	4" Sch 40 PVC	+2.3
Bottom of Well Riser		65.6
Top of Well Screen	4" Sch 40 PVC	65.6
Bottom of Well Screen	.010 Slot	81.0
Top of Peltonite Seal	Enviro Plug	61.0
Bottom of Peltonite Seal		63.6
Top of Gravel Pack	10-20 Silica	63.6
Bottom of Gravel Pack		81.0
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		73
Total Depth of Borehole		81.0



Top of Protective Casing ______
Top of Riser 2.3
Ground Surface 0.0

Top of Seal 61.0

Top of Gravel Pack 63.6

Top of Screen 65.6

Bottom of Screen 81.0
Bottom of Borehole 81.0

Comments: 16 Bags (50lb) Sand, 1½ Bags (50lbs) Hole Plug, 17 Bags Cement (94lb) 1½ Bags Bentonite Powder (50lb) Groundwater @ 73.15 BGS After Installation Strong odor Noted on Probe

Note: Will Complete well @ Later Date

Geologist Signature [signature]

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # _____
Well # MW-3
Page 1 of 1

Project Name EPNG- Pit Drilling
Project Number 14509 Phase 6000
Project Location State Gas Com #1A1, 71669

On-Site Geologist S. Kelly
Personnel On-Site M. Donohue, J. Long, H. Liles
Contractors On-Site _____
Client Personnel On-Site _____

Elevation _____
Well Location _____
GWL Depth _____
Installed By M. Donohue

Date/Time Started 11/29/95, 1245
Date/Time Completed 11/29/95, 1630

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout	Type I & II cement w/ 5% bentonite	0.0'
Bottom of Grout	17-94# bag cement 1.5-50# bag bentonite	-59.5
Top of Well Riser	4" Sch. 40 PVC	
Bottom of Well Riser	" "	-65.3
Top of Well Screen	4" Sch. 40, .010 slot PVC	-65.3
Bottom of Well Screen	" "	-80.3
Top of Peltonite Seal	3/4" Holeplug - bentonite pellets	-59.5
Bottom of Peltonite Seal	2-50# sacks	-62.8
Top of Gravel Pack	10-20 CSSI Sand	-62.8'
Bottom of Gravel Pack	Tag @ 11/29/95 16-50# sacks	-80.7
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-75.15
Total Depth of Borehole		-80.7'

Top of Protective Casing
Top of Riser 2.4'
Ground Surface 0.0

Top of Seal -59.5'

Top of Gravel Pack -62.8'

Top of Screen 65.7'
-65.3'
dk 11/29/95

Bottom of Screen -80.3'
Bottom of Borehole -80.7'

Comments: .4' PVC end cap.

Geologist Signature Scott Kelly

MONITORING WELL INSTALLATION RECORD

Phillip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # _____
Well # MW-4
Page 1 of 1

Project Name EPNG Pit Drilling
Project Number 14504 Phase 60000
Project Location State Gas Com N#1 71689
On-Site Geologist S. Kelly
Personnel On-Site M. Donahue, H. Liles
Contractors On-Site _____
Client Personnel On-Site _____

Elevation _____
Well Location _____
GWL Depth _____
Installed By M. Donahue
Date/Time Started 11/30/95, 1330
Date/Time Completed 11/30/95, 1700

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout	Type I & II cement w/ 5% bentonite	0.0
Bottom of Grout		59.5
Top of Well Riser	4" Sch. 40 PVC	+2.5
Bottom of Well Riser	" "	65.3
Top of Well Screen	4" Sch. 40, .010 slot PVC	65.3
Bottom of Well Screen	" "	80.3
Top of Peltonite Seal	3/4" Holeplug bentonite pellets	59.5
Bottom of Peltonite Seal	2 - 50# bags	63.0
Top of Gravel Pack	10-20 CSSI sand	63.0
Bottom of Gravel Pack	12 - 50# bags	80.7
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		79.58
Total Depth of Borehole		80.7

Comments: .4' PVC end cap at bottom of screen. Water level given above was taken at 1630. At 1645 water level was 79.4'

Geologist Signature Sarah Kelly

MONITORING WELL INSTALLATION RECORD

Borehole # mw-05
Well #
Page 1 of 1

Philip Services Corporation
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS Drilling
Project Number 62800219 Cost Code 35
Project Location R12, T31, S16, QH

Elevation
Well Location STATE GAS COM N-1
GWL Depth 72.93'
Installed By K. Padilla

On-Site Geologist J. Wagnon
Personnel On-Site R. Lefebre, D. PADILLA
Contractors On-Site None
Client Personnel On-Site None

Date/Time Started 6/30/00 1158
Date/Time Completed 7/5/00

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		+3
Bottom of Protective Casing		0
Top of Permanent Borehole Casing		0
Bottom of Permanent Borehole Casing		-80
Top of Concrete	QUIKRETE	+0.04
Bottom of Concrete		0
Top of Grout		0
Bottom of Grout		-61
Top of Well Riser		+3
Bottom of Well Riser		-80
Top of Well Screen		-65
Bottom of Well Screen		-80
Top of Peltonite Seal	3/8 HOLEPLUG BENTONITE	-61
Bottom of Peltonite Seal		-63
Top of Gravel Pack	CO SIO2 SAND 10 x 20	-63
Bottom of Gravel Pack		-80
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		-72.93
Total Depth of Borehole		-80

Top of Protective Casing +3
Top of Riser +3
Ground Surface 0
QUIKCEL (2 BAGS)
CLASS I-II CEMENT (8 BAGS)
Top of Seal -61
HOLE PLUG (1 BAG)
Top of Gravel Pack -63
Top of Screen -65
SILICA SAND (8 BAGS) 10 x 20
Bottom of Screen -80
Bottom of Borehole -80

Comments:

Geologist Signature Jenn Wagnon

2014 SEP 30 AM 10:33

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STATE ENGINEER OFFICE AZTEC, NEW MEXICO

MONITORING WELL INSTALLATION RECORD

Borehole # ______
Well # MW-6
Page ____ of ____

AESE/GEM
906 San Juan Blvd. Ste. D
Farmington, New Mexico 87401
(505) 566-9116 FAX (505) 566-9120

Project Name: EPFS 5 Monitor Wells
Project Number: 6165 Cost Code: ______
Project Location: State Gas Com N #1
Meter Code 71669

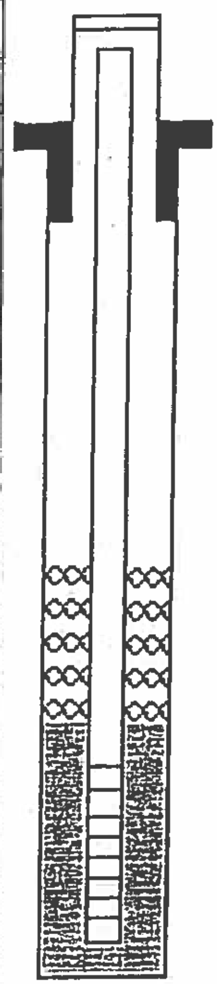
Elevation: ≈ 6115'
Well Location: MW-6 T31N R12W S16, H
GWL Depth: 78.34 (12/17/01)
Installed By: ACPI

On-Site Geologist: AESE NEE
Personnel On-Site: ______
Contractors On-Site: ACPI K Padilla TJ Valdez
Client Personnel On-Site: L Benally

Date/Time Started: 12/13/01 0830
Date/Time Completed: 12/17/01 1000

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	6" steel	+3.00
Bottom of Protective Casing	6" steel	-1.00
Top of Permanent Borehole Casing	NA	
Bottom of Permanent Borehole Casing	NA	
Top of Concrete	Quickcrete	+0.33
Bottom of Concrete	Quickcrete	-9.00
Top of Grout	Type I/II Portland 9	-9.00
Bottom of Grout	bags w/ 15% Quickgel	-60.04
Top of Well Riser	2" DIA PVC	+2.60
Bottom of Well Riser	2" DIA PVC	-65.15
Top of Well Screen	2" DIA PVC	-65.15
Bottom of Well Screen	.010 slott	-80.00
Top of Peltonite Seal	1 bag 3/8"	-60.04
Bottom of Peltonite Seal	chip Baroid Hole plug	-63.67
Top of Gravel Pack	9 bags 10-20	-63.67
Bottom of Gravel Pack	silica SAND	-80.00
Top of Natural Cave-In	NA	
Bottom of Natural Cave-In	NA	
Top of Groundwater		78.34
Total Depth of Borehole		80.0



Top of Protective Casing: 3.00
Top of Riser: 2.60
Ground Surface: 0.00
Top of Seal: 60.04
Top of Gravel Pack: 63.67
Top of Screen: 65.15
Bottom of Screen: 80.0
Bottom of Borehole: 80.0

Comments: ______

Geologist Signature ______

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MONITORING WELL INSTALLATION RECORD

Borehole # _____
Well # MW-7
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

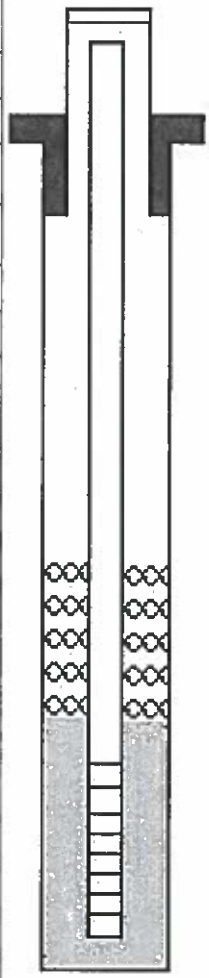
Project Name MWH Ground Water
Project Number _____ Cost Code _____
Project Location State Gas Com N #1

Elevation 6060'
Well Location 36° 54.071' N, 108° 05.792' W
GWL Depth 68'
Installed By Envirotech

On-Site Geologist Ashley Ager
Personnel On-Site
Contractors On-Site Danny Padilla and assistant
Client Personnel On-Site

Date/Time Started 11/20/06; 1506
Date/Time Completed 11/20/06; 1735

Depths in Reference to Ground Surface		
Item	Material	Depth (feet)
Top of Protective Casing	Steel	2.5
Bottom of Protective Casing		-2.5
Top of Permanent Borehole Casing		NA
Bottom of Permanent Borehole Casing		NA
Top of Concrete	Concrete	0.25
Bottom of Concrete		-1
Top of Grout		-1
Bottom of Grout		-59
Top of Well Riser	Sch. 40 PVC	-2.3
Bottom of Well Riser		-64.75
Top of Well Screen	Sch. 40 PVC	-64.75
Bottom of Well Screen		-84.75
Top of Peltonite Seal	Bentonite	-59
Bottom of Peltonite Seal		-62
Top of Gravel Pack	Sand	-62
Bottom of Gravel Pack		-85
Top of Natural Cave-In		NA
Bottom of Natural Cave-In		NA
Top of Groundwater		-68
Total Depth of Borehole		-85



Top of Protective Casing 2.5
Top of Riser 2.5
Ground Surface 0
Top of Seal -59
Top of Gravel Pack -62
Top of Screen -64.75
Bottom of Screen -84.75
Bottom of Borehole -85

Comments: 50 lb bags of sand used: 15 ea. , 50 lb bags of bentontie used: 1 ea.
3 gal buckets of grout used: 1 ea., 50 lb bags of cement slurry used: 4

Geologist Signature Ashley L. Ager

MONITORING WELL INSTALLATION RECORD

Borehole # _____
Well # MW-8
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

Project Name MWH Ground Water
Project Number _____ Cost Code _____
Project Location State Gas Com N #1

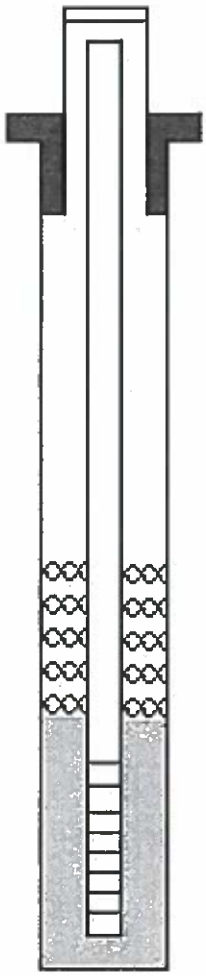
Elevation 6064'
Well Location 36° 54.072' N, 108° 05.751' W
GWL Depth ?
Installed By Envirotech

On-Site Geologist Ashley Ager
Personnel On-Site
Contractors On-Site Kelly Padilla and assistant
Client Personnel On-Site

Date/Time Started 11/21/06; 1530
Date/Time Completed 11/22/06; 1450

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	Steel	TBA
Bottom of Protective Casing		TBA
Top of Permanent Borehole Casing		NA
Bottom of Permanent Borehole Casing		NA
Top of Concrete	Concrete	0.25
Bottom of Concrete		-0.5
Top of Grout		-0.5
Bottom of Grout		-59
Top of Well Riser	Sch. 40 PVC	2.5
Bottom of Well Riser		-64.75
Top of Well Screen	Sch. 40 PVC	-64.75
Bottom of Well Screen		-84.75
Top of Peltonite Seal	Bentonite	-59
Bottom of Peltonite Seal		-62
Top of Gravel Pack	Sand	-62
Bottom of Gravel Pack		-85
Top of Natural Cave-In		NA
Bottom of Natural Cave-In		NA
Top of Groundwater		?
Total Depth of Borehole		-85



Top of Protective Casing TBA
Top of Riser 2.5
Ground Surface 0
Top of Seal -59
Top of Gravel Pack -62
Top of Screen -64.75
Bottom of Screen -84.75
Bottom of Borehole -85

Comments: 50 lb bags of sand used: 9 ea. , 50 lb bags of bentontie used: 1 ea.
3 gal buckets of grout used: 1 ea., 50 lb bags of cement slurry used: 3. Protective casing will be added Monday after grout has time to set.

Geologist Signature Ashley L. Ager

MONITORING WELL INSTALLATION RECORD

Borehole # _____
Well # MW-9
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

Project Name: MWH Ground Water
Project Number: _____ Cost Code: _____
Project Location: State Gas Com N #1

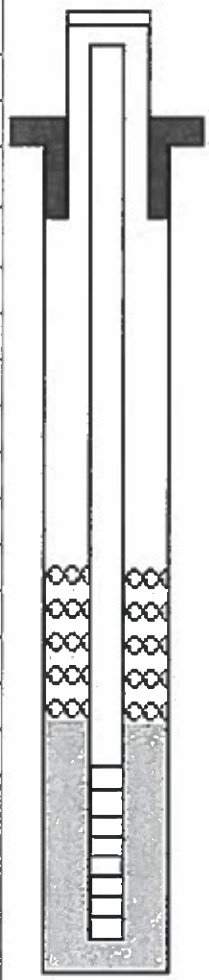
Elevation: 6124'
Well Location: 36° 53.998' N, 108° 05.766' W
GWL Depth: 74'
Installed By: Envirotech

On-Site Geologist: Ashley Ager
Personnel On-Site: _____
Contractors On-Site: Kelly Padilla and assistant
Client Personnel On-Site: _____

Date/Time Started: 11/22/06; 1030
Date/Time Completed: 11/22/06; 1315

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	Steel	TBA
Bottom of Protective Casing		TBA
Top of Permanent Borehole Casing		NA
Bottom of Permanent Borehole Casing		NA
Top of Concrete	Concrete	0.25
Bottom of Concrete		-0.5
Top of Grout		-0.5
Bottom of Grout		-55
Top of Well Riser	Sch. 40 PVC	2.6
Bottom of Well Riser		-59.75
Top of Well Screen	Sch. 40 PVC	-59.75
Bottom of Well Screen		-79.75
Top of Peltonite Seal	Bentonite	-55
Bottom of Peltonite Seal		-58
Top of Gravel Pack	Sand	-58
Bottom of Gravel Pack		-80
Top of Natural Cave-In		NA
Bottom of Natural Cave-In		NA
Top of Groundwater		-74.1
Total Depth of Borehole		-80



Top of Protective Casing TBA
Top of Riser 2.6
Ground Surface 0
Top of Seal -55
Top of Gravel Pack -58
Top of Screen -59.75
Bottom of Screen -79.75
Bottom of Borehole -80

Comments: 50 lb bags of sand used: 7 ea. , 50 lb bags of bentontie used: 1 ea. 3 gal buckets of grout used: 1 ea., 50 lb bags of cement slurry used: 3. Protective casing will be added Monday after grout has time to set.

Geologist Signature Ashley L. Ager

ATTACHMENT D

MWH

NEW MEXICO
STATE LAND OFFICE
When we Take Care of our Land, our Land Takes Care of us!

NEW MEXICO STATE LAND OFFICE
Commissioner of Public Lands
Ray Powell, M.S., D.V.M.
New Mexico State Land Office Building
P.O. Box 1148, Santa Fe, NM 87504-1148

RIGHT OF ENTRY PERMIT
CONTRACT NO. ROE-2571
(Remediation)

1. RIGHT OF ENTRY PERMIT

This permit is issued under the authority of NMSA 1978, Section 19-1-2. Therefore, and in consideration of and subject to the terms, covenants, conditions, agreements, obligations and reservations contained in the permit and all other existing rights, the Commissioner of Public Lands, New Mexico State Land Office, State Of New Mexico, hereinafter called "COMMISSIONER," grants to **El Paso CGP Company.** State of Incorporation (if applicable) , whose address is **1001 Louisiana Street, Houston, Texas 77002, hereinafter** called "PERMITTEE," authorized use of a specific tract(s) of State Trust Land only for the term, and only for the permitted use, described in this permit.

2. TERM AND LAND DESCRIPTION

Right of entry is granted for a term of **180 days**, commencing, **September 18, 2014,** and ending **March 16, 2015** to the following State Trust Lands.

Section 16, Township 31 North, Range 12 West. SE ¼ NE ¼ San Juan County

3. APPLICATION and PROCESSING FEE

$530.00

4. PERMITTED USE, PERSONNEL, EQUIPMENT AND MATERIALS

Permitted use is for the purpose of: **Install 10 new groundwater monitoring wells**

(MW-10 through MW-19). Please note that once monitor wells have been placed EL Paso CGP company will have to amend WM-230 to include the placement of new monitor wells).

Personnel present on State Trust Land: **MWH Americas, Inc. & National EWP**
Equipment & Materials present on State Trust Land: **CME 85 drill Rig & well markers**

Prior to execution of project company must identify and contact the Grazing Lessee.

The granting of this permit does not allow access across private lands.

5. IMPROVEMENTS

No improvements shall be placed on the premises without the prior written consent of the Commissioner.

6. RESERVATIONS

Commissioner reserves the right to execute leases, rights of way, easements, permits, exchange agreements, sale agreements, permits and other lawful rights on or across the land covered by this permit, including but not limited to any such rights for mining purposes and for the extraction of oil, gas, salt, geothermal resources, and other mineral deposits there from and the right to go upon, explore for, mine, remove and sell same.

7. COMPLIANCE WITH LAWS

Permittee shall at its own expense comply fully with and be subject to all applicable regulations, rules, ordinances, and requirements of law or of the Commissioner, including but not limited to the regulations of the State Land Office; Chapter 19 NMSA governing State Trust Lands; federal and state environmental laws and regulations; and the New Mexico Cultural Properties Act, NMSA 1978 Sections 18-6-1 through 18-6-23. It is illegal for any person or his agent to appropriate, excavate, injure, or destroy any historic, or prehistoric ruin or monument, or any object of historical, archaeological, architectural, or scientific value situated on lands owned or controlled by the State Land Office without a valid permit issued by the Cultural Properties Review Committee and approved by the Commissioner of Public Lands.

8. HOLD HARMLESS AND IMDEMNIFICATION

Permittee shall save, hold harmless, indemnify and defend Commissioner, the State Land Office, the State of New Mexico, and any of their officers, employees or agents, in their official and individual capacities, of and from any and all liability, claims, losses, damages, costs, and fees arising out of or alleged to arise out of, or directly or indirectly connected with, the operations of Permittee under this permit on or off State Trust Lands or arising out of the presence on State Trust Lands of any equipment, material, agent, invitee, contractor or subcontractor of Permittee. This Hold Harmless and

Indemnification clause covers any claim, including any brought in any court or before any administrative agency, of any loss or alleged loss, and any damages or alleged damages asserted with respect to any violation or alleged violation of any state, federal or local law or regulation, including but not limited to any environmental law or regulation, any cultural properties law (including the New Mexico Cultural Properties Act, cited above) or regulation, and any alleged damage to the property, rights or interests of any State Land Office lessee, right-of-way holder, or other permittee.

9. AMENDMENT

This permit shall not be altered, changed, or amended except by an instrument in writing executed by Commissioner and Permittee.

10. WITHDRAWAL

Commissioner reserves the right to withdraw any or all of the land authorized for use under this permit. If applicable, Permittee shall vacate the acreage specified within 30 days after receipt of written notification of withdrawal from the Commissioner.

11. CANCELLATION

The violation by Permittee of any of the terms, conditions, or covenants of this permit or the nonpayment by Permittee of the fees due under this permit shall at the option of the Commissioner be considered a default and shall cause the cancellation of this permit 30 days after Permittee has been sent written notice of such.

12. PRESERVE AND PROTECT

The Permittee agrees to preserve and protect the natural environmental conditions of the land encompassed in this permit, and to take those reclamation or corrective actions that are accepted soil and water conservation practices and that are deemed necessary by the Commissioner to protect the land from pollution, erosion, or other environmental degradation. The Permittee further agrees not to injure the property of, or interfere with the operations or rights of, any State Land Office lessee, right-of-way holder, easement holder or other permittee who has rights to use the State Trust Land subject to this permit.

13. RECLAMATION, REMOVAL OF EQUIPMENT, MATERIALS, AND WASTE

The Permittee agrees to reclaim those areas that may be damaged by activities conducted thereon.

The Permittee agrees to remove from the State Trust Lands, no later than the end of the term of this permit, all equipment, and materials it has placed or brought upon the land and to clean up and remove from the land any trash, waste, effluent, or other products used or brought upon the land in connection with this permit.

14. SPECIAL INSTRUCTIONS AND/OR RESTRICTIONS

1. No off road traffic allowed.

2. No wood collection or tree cutting allowed.

3. Disturbing, dislodging, damaging, defacing, destroying or removing historical archaeological, paleontological or cultural sites or artifacts is prohibited.

4. Disturbing, dislodging, damaging, defacing, destroying any improvement, fixture, item, object or thing placed or located in, under or upon the land is prohibited.

5. This permit does not grant a right to enter State Trust Lands to which there is no public access.

6. Any uses or activities not within the scope of this permit are not allowed unless prior written approval from the Commissioner of Public Lands is granted.

7. OTHER

WITNESS the hands and seals of PERMITTEE and COMMISSIONER on the day(s) and year entered below.

Joseph Wiley Telephone: 713-420-3475

PERMITTEE

ACKNOWLEDGMENT

STATE OF Texas)

COUNTY OF Harris)

The foregoing instrument was acknowledged before me this 24 day of September, 20 14.

My Commission Expires: 09/14/2016 Breanna Nicole Polk

NOTARY PUBLIC

BREANNA NICOLE POLK
Notary Public, State of Texas
My Commission Expires
September 14, 2016

COMMISSIONER OF PUBLIC LANDS DATE: _____

ROE- 2571

2014 SEP 30 AM 10:31

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 283232

CONDITIONS

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID: 7046
	Action Number: 283232
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	11/7/2023