



McNabb Partners, LLC
 Hobbs • Carlsbad • Midland
 575.397.0050
 www.mcnabbpartnersllc.com

October 27, 2023

NM Oil Conservation Division
 Environmental Bureau
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

RE: Characterization Report and Remediation Workplan
 Incident ID: NAB1822243840
 Mobil 22 Federal
 Project ID: 20180727-1300-mobil22fed

NMOCD:

McNabb Partners LLC submits this characterization report and remediation workplan on behalf of Stephens and Johnson Operating Company (SJOC).

Incident Number NAB1822243840 is addressed in this report. The incident is located offsite, to the northwest of the active Mobil 22 Federal production site. The release occurred on July 27, 2018, from a leak at a surface oil flowline. The flowline was adjacent to the lease road, northwest of the Mobil 22 Fed production site. The release consisted of approximately 2 bbls of oil and 2 bbls of produced water and covered an area of approximately 300 square ft. The well was shut down and the flowline was repaired. Although the release is <5 bbls and non-reportable, a C-141 NOR was submitted to NMOCD on July 31, 2018. Within 24-hours of the release, an area of approximately 250 cubic ft of impacted soil was excavated and transported off-site to an approved disposal facility.

This report addresses Incident NAB1822243840

Incident #	Date	RP #	AKA
NAB1822243840	07/27/2018	2RP-4905	Oil Well Flowline

The below Incidents related to the Mobil 22 Federal Battery location will be reported under a separate report cover.

Incident #	Date	RP #	AKA
NAPP2320031997	(Legacy Release) Submitted 07/19/2023		Tank Battery Area
NAB1822240516	07/26/2018	2RP-4909	Flowline Header
NAB1819054040	06/24/2018	2RP-4839	Water Injection
NMCS0331657138	07/16/2004		Tank Pump



Figure 1: Southern portion of release facing south. (Additional site photos to be included with remediation/closure report). Date: 2023-07-20 14:21:03; GPS: 32.021361, -103.964578

1. Characterization

The following sections address items as described in 19.15.29.11.A, paragraphs 1- 4. Please refer to the C-141 characterization checklist for additional setback criteria and verification (Plates 2-9).

1.1. Site Map

The horizontal extent of the release was determined by reported visual observations. Plate 1 shows the release extent relative to the Mobil 22 Federal #1 Wellhead. The source of the release is located at 32.0215599, -103.9645521 (Lat, Long; NAD83). The release extent covered an area of approximately 300 sq. ft.



1.2. Depth to Ground Water

The nearest measurement of depth to water are from two soil borings which were drilled by Atkins Engineering in July 2022, located approximately 250-300 ft south of the release extent. The borings are identified on Plate 2 according to their OSE File #. Depth to water gauged at 67-feet below ground surface (bgs). The driller logs are located in Appendix B. These borings have been plugged.

Boring ID	OSE File #	Depth to Water (ft)
TW-1	C-04653 (POD6)	67.1
TW-2	C-04653 (POD5)	67.7

1.3. Wellhead Protection Area

Plate 3 shows that the release extent is:

- Not within incorporated municipal boundaries or within a defined municipal fresh water well field.
- Within ½-mile of any documented water sources (wells and springs). The water well USGS-9523 is located 0.44 miles to the northeast.
- Not within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes.
- Not within 1000 feet of any other freshwater well or spring. Water well USGS-9401 is mislocated in the USGS database and is located 1-mile west of the release extent. The PLSS attribute data locates this well in 26S.29E.22.333. The metadata for the USGS-9401 well with Site Number “320112103574501” is located in Appendix B.

1.4. Distance to Nearest Significant Water Course

Plate 4 shows that the release extent is:

- Within ½ mile of a significant water course. The intermittent watercourse is located 879 feet northeast of the release extent.
- Not within 300 feet of a continuously flowing watercourse or any other significant watercourse.
- Not within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).



1.5. Soil/Waste Characteristics

The USDA Natural Resources Conservation Service (NRCS) soil survey¹ describes the upper 5-feet of lithology as

Upton-Simona Complex, 1 to 15% slopes, eroded: with a composition of

- Upton Soils (45% of area)
 - Slope: 1 to 15 percent
 - Typical profile
 - ✓ H1 - 0 to 9 inches: gravelly loam
 - ✓ H2 - 9 to 13 inches: gravelly loam
 - ✓ H3 - 13 to 21 inches: cemented
 - ✓ H4 - 21 to 60 inches: very gravelly loam
- Simona Soils (35% of area)
 - Slope: 1 to 5 percent
 - Typical profile
 - ✓ H1 - 0 to 6 inches: gravelly fine sandy loam
 - ✓ H2 - 6 to 20 inches: gravelly fine sandy loam
 - ✓ H3 - 20 to 24 inches: indurated

The lithology as described by the NRCS is consistent with professional observations during hand auger borehole activities during characterization sampling.

The release extent was divided into sample grids of not more than 200 sq ft. A soil sample was collected from each grid base and around the perimeter of the release extent for laboratory analysis of chloride, TPH, Benzene, and BTEX.

- Plate 10 shows the confirmation sample grid layout with square footage.
- Plate 11 shows the confirmation sample locations.
- Table A shows the coordinates of the sample points.
- Table B shows the summary of analytical.

Closure Criteria as listed in Table 1 of 19.15.29 NMAC, where depth to water is 67 feet, is defined as

DTW 51-100 ft	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)
0 - 4 feet & "not in-use"	600	--	100	10	50
> 4 ft or "in-use"	10,000	1,000	2,500	10	50

¹ NRCS Field Guide and the NRCS web survey tool (<https://websoilsurvey.nrcs.usda.gov/app/>)



Project ID: 20180727-1300-mobil22fed

Location: Mobil 22 Federal

Incident #: NAB1822243840

2. Remediation & Restoration Workplan

SJOC proposes to complete remediation efforts initiated in July 2018 as a part of the initial response at the time of the release occurrence.

Characterization/delineation samples were not collected during initial remediation activities. Therefore, sampling was conducted on 09/26/2023 to satisfy 19.15.29 NMAC. Sampling results indicate that all sample points, except for base grid G-03, met the most stringent closure criteria as noted above and therefore do not require further remediation. The prior remediation effort did not exceed 1-foot in depth as impact did not appear to extend beyond ½ to one foot in depth.

SJOC proposes to excavate base grid G-03 until the base and wall samples meet the above closure criteria for off-site areas. As indicated in the 2-day sampling notice email to NMOCD on 09/17/2023, characterization/delineation sample points that met closure criteria will also be used as confirmation sampling for closure.

When remediation and confirmation sampling is completed at G-03, the excavated area will be backfilled with clean soil and the surface will be contoured and restored as an established pipeline ROW per 19.15.29.13.A-C.

An estimated 200 cu. ft. of material will be excavated and hauled off-site to an approved disposal facility. Remediation will begin within 90-days of workplan approval. If confirmation samples meet the above closure criteria, we will submit a closure report within 45-days of laboratory results.

Please contact me with any questions at 970-570-9535.

Sincerely,

Andrew Parker
Environmental Manager
McNabb Partners
c: (970) 570-9535

Copy: Mike Kincaid; Stephen & Johnson Operating Company
Bureau of Land Management – Carlsbad Field Office.
Ross Ranch

Incident ID	NAB1822243840
District RP	2RP-4905
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release? Plate 2	<u>67</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? Plate 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)? Plate 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? Plate 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? Plate 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? Plate 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? Plate 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland? Plate 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine? Plate 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology? Plate 8 Release is located in a medium potential Karst area.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain? Plate 9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information Additional photos of site and remediation to be included in closure report
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

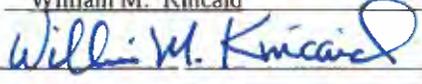
State of New Mexico
Oil Conservation Division

Incident ID	NAB1822243840
District RP	2RP-4905
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: William M. Kincaid

Title: Petroleum Engineer

Signature: 

Date: 10/27/2023

email: mkincaid@sjoc.net

Telephone: 940-716-5333

OCD Only

Received by: Shelly Wells

Date: 10/30/2023

Incident ID	NAB1822243840
District RP	2RP-4905
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: William M Kincaid Title: Petroleum Engineer
 Signature: *William M. Kincaid* Date: 10/27/2023
 email: mkincaid@sjoc.net Telephone: 940-716-5333

OCD Only

Received by: Shelly Wells Date: 10/30/2023

Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: *Ashley Maxwell* Date: 10/31/2023

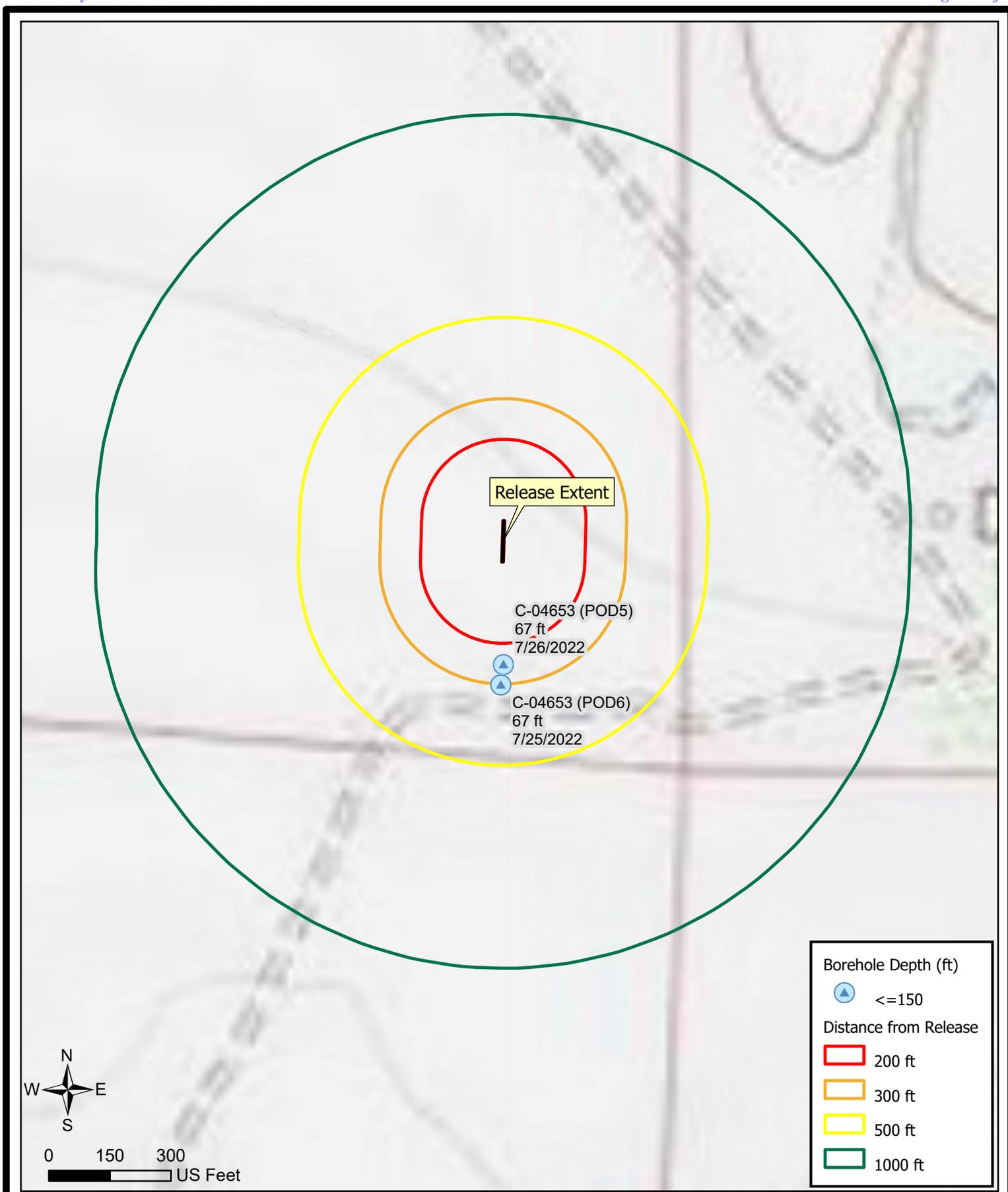
Plates



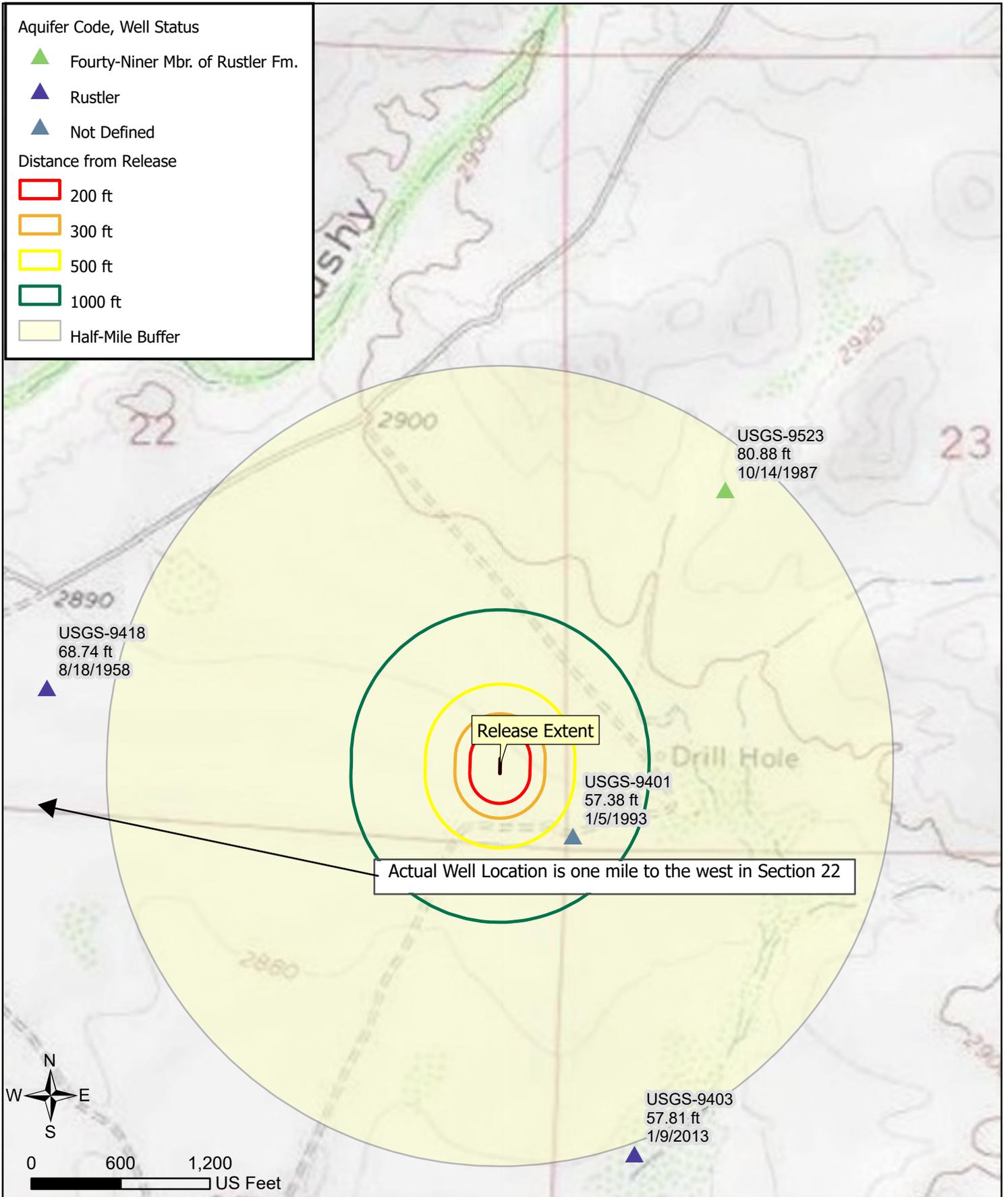
McNabb Partners, LLC
Hobbs • Carlsbad • Midland



 McNabb Partners, LLC Hobbs • Carlsbad • Midland	Site Map SJOC: Mobil 22 Fed North Flowline	Plate 1
	Incident #: NAB1822243840 Prj. ID: 20180727-1300-mobil22fed	10/16/2023

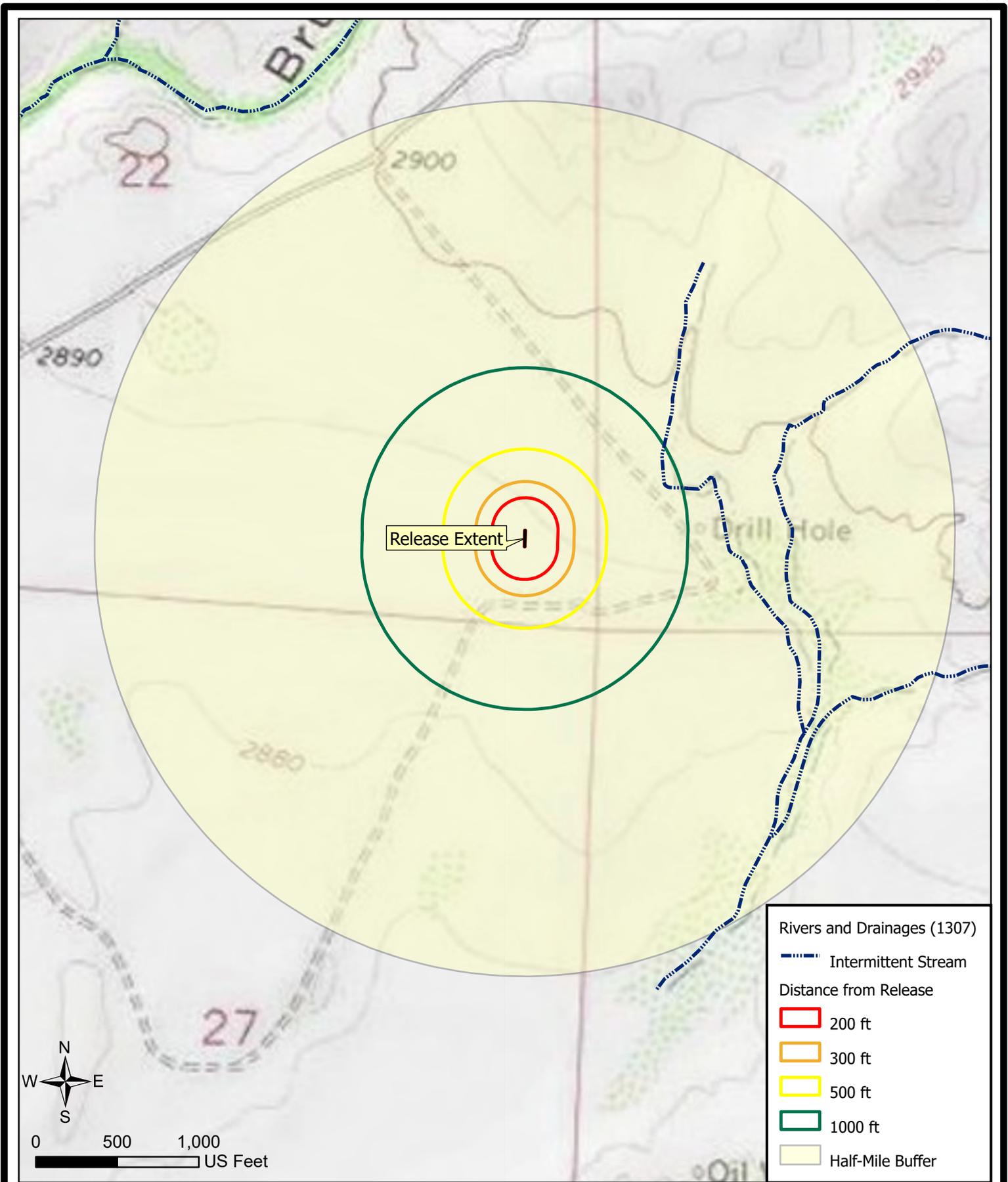


<p>McNabb Partners, LLC Hobbs • Carlsbad • Midland</p>	<p>Depth to Water SJOC: Mobil 22 Fed North Flowline</p>	<p>Plate 2</p>
	<p>Incident #: NAB1822243840 Prj. ID: 20180727-1300-mobil22fed</p>	<p>10/16/2023</p>

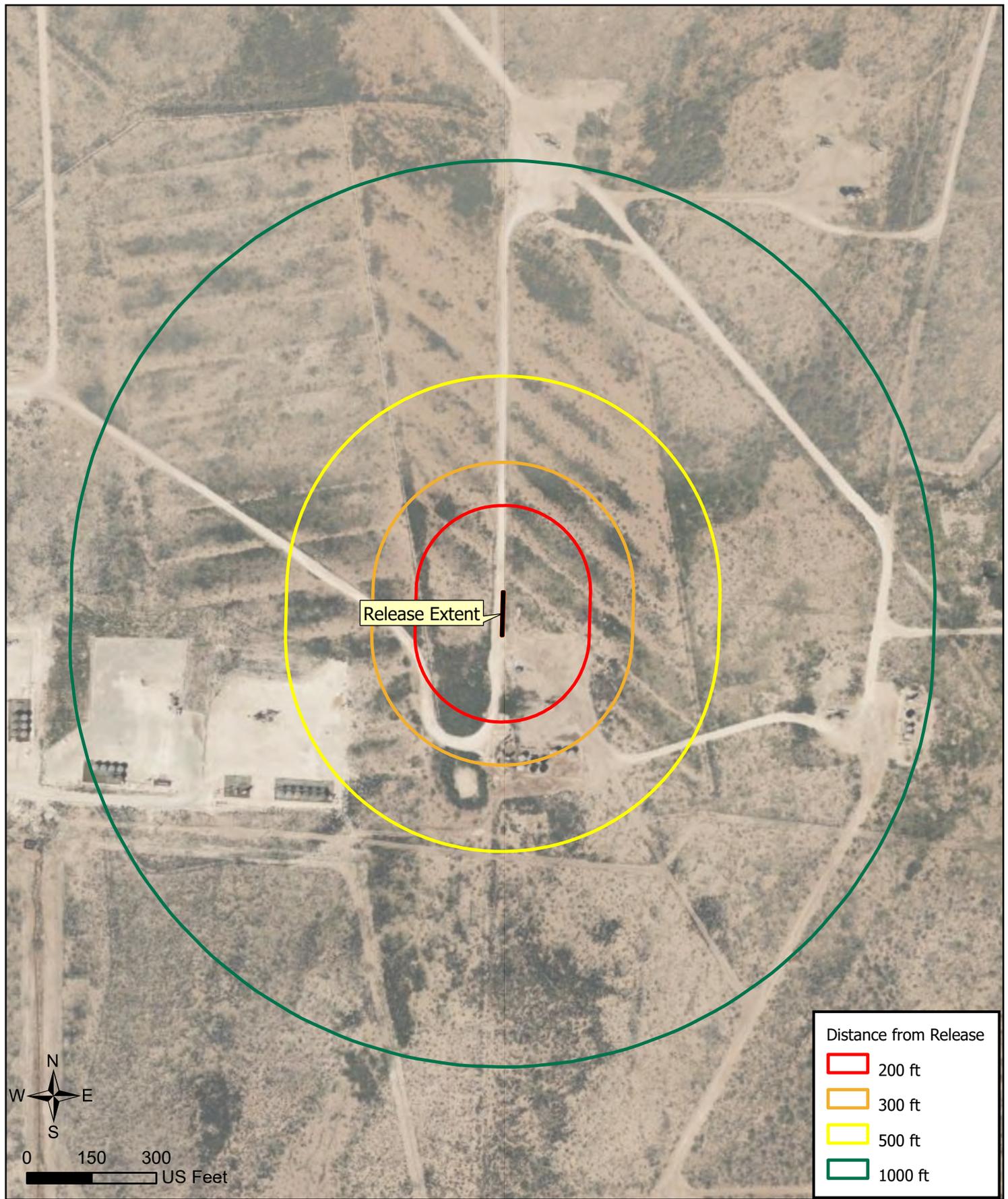


Wellhead Protection
 SJOC: Mobil 22 Fed North Flowline
 Incident #: NAB1822243840
 Prj. ID: 20180727-1300-mobil22fed

Plate 3
 10/17/2023



 McNabb Partners, LLC Hobbs • Carlsbad • Midland	Significant Watercourses SJOC: Mobil 22 Fed North Flowline	Plate 4
	Incident #: NAB1822243840 Prj. ID: 20180727-1300-mobil22fed	10/16/2023



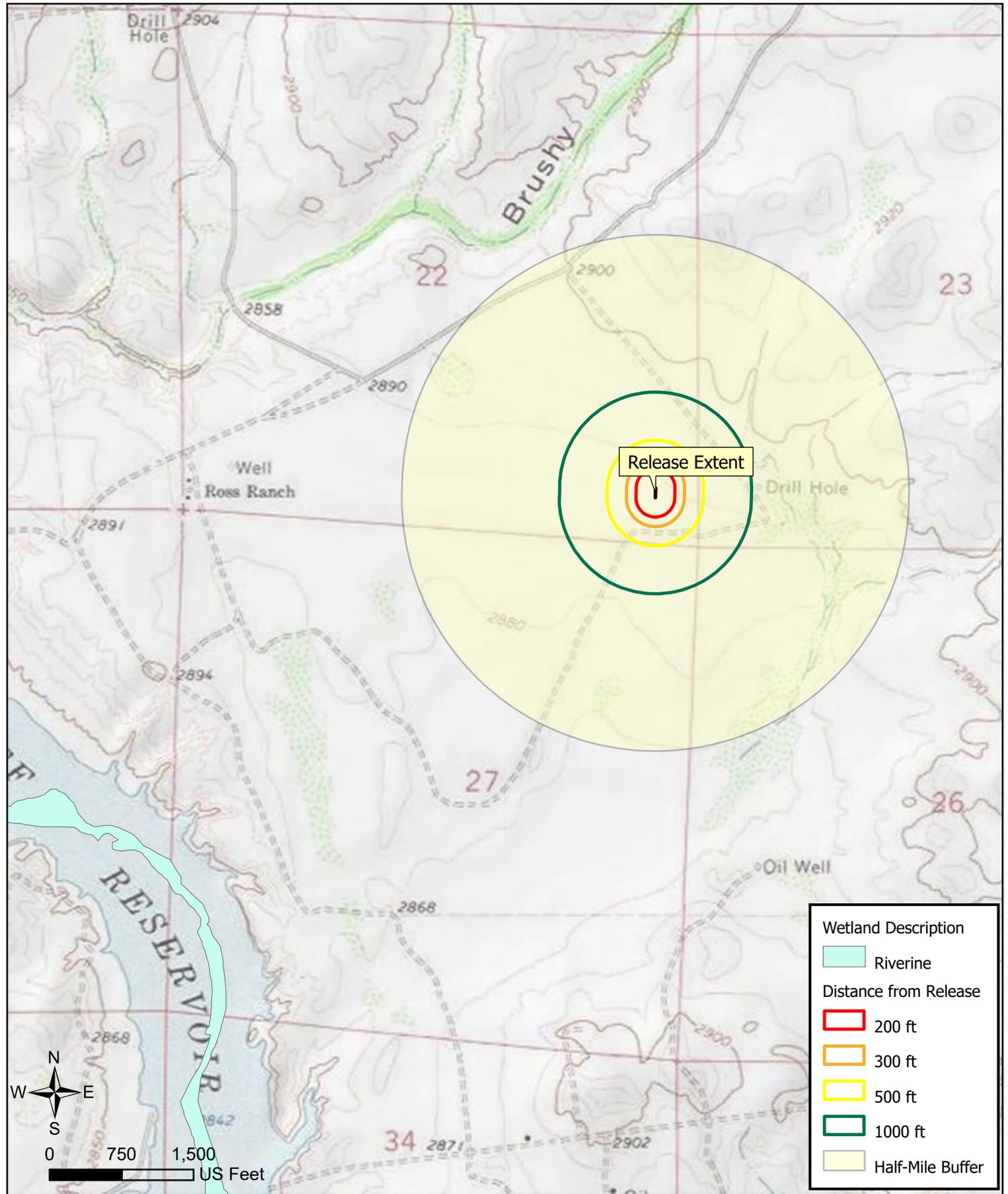
McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Nearby Structures
SJOC: Mobil 22 Fed North Flowline

Incident #: NAB1822243840
Prj. ID: 20180727-1300-mobil22fed

Plate 5

10/16/2023



Wetland Description	
	Riverine
Distance from Release	
	200 ft
	300 ft
	500 ft
	1000 ft
	Half-Mile Buffer

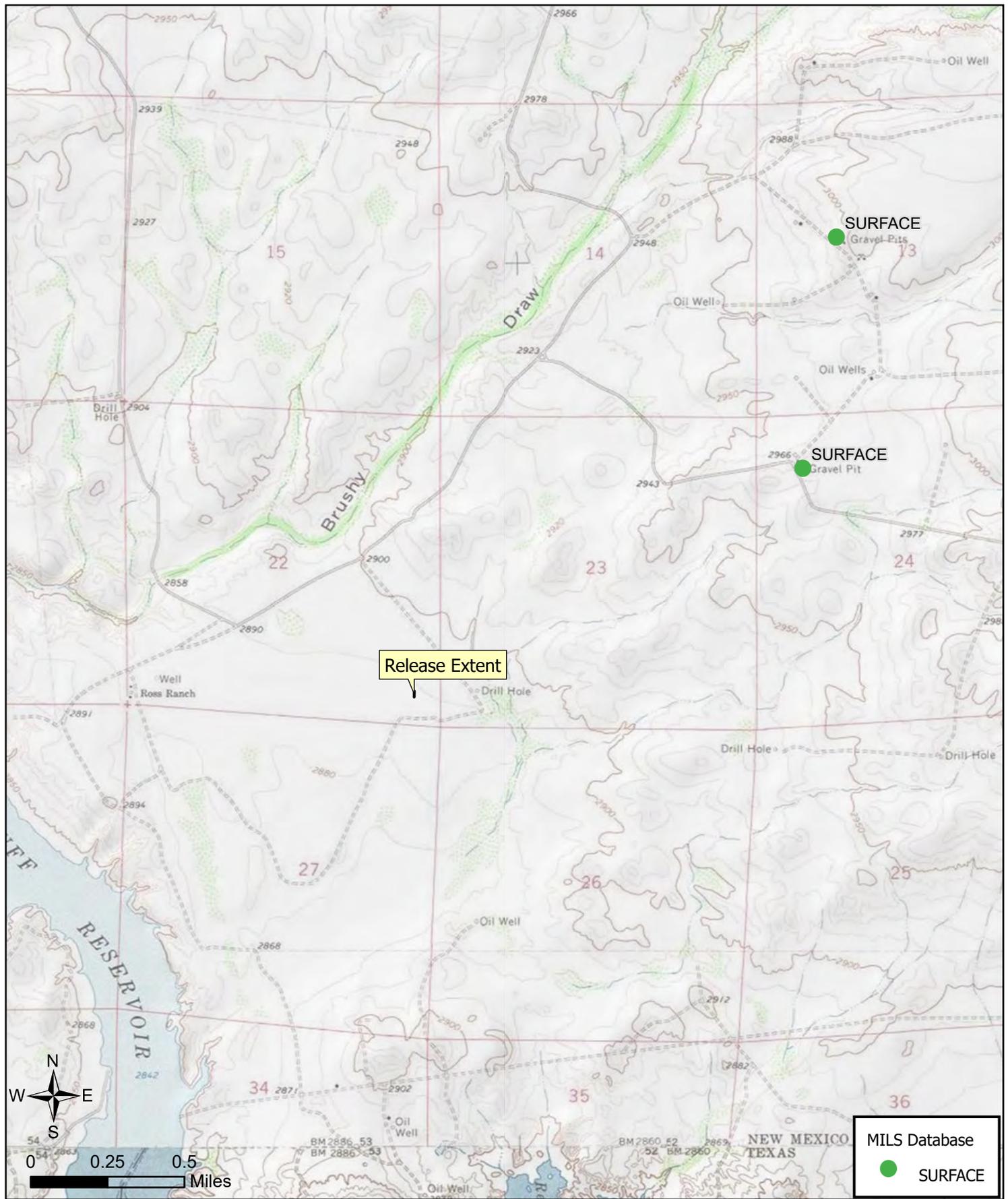


0 750 1,500 US Feet

McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Wetlands
 SJOC: Mobil 22 Fed North Flowline
 Incident #: NAB1822243840
 Prj. ID: 20180727-1300-mobil22fed

Plate 6
 10/16/2023



Release Extent

SURFACE
Gravel Pit

SURFACE
Gravel Pit

MILS Database
 SURFACE



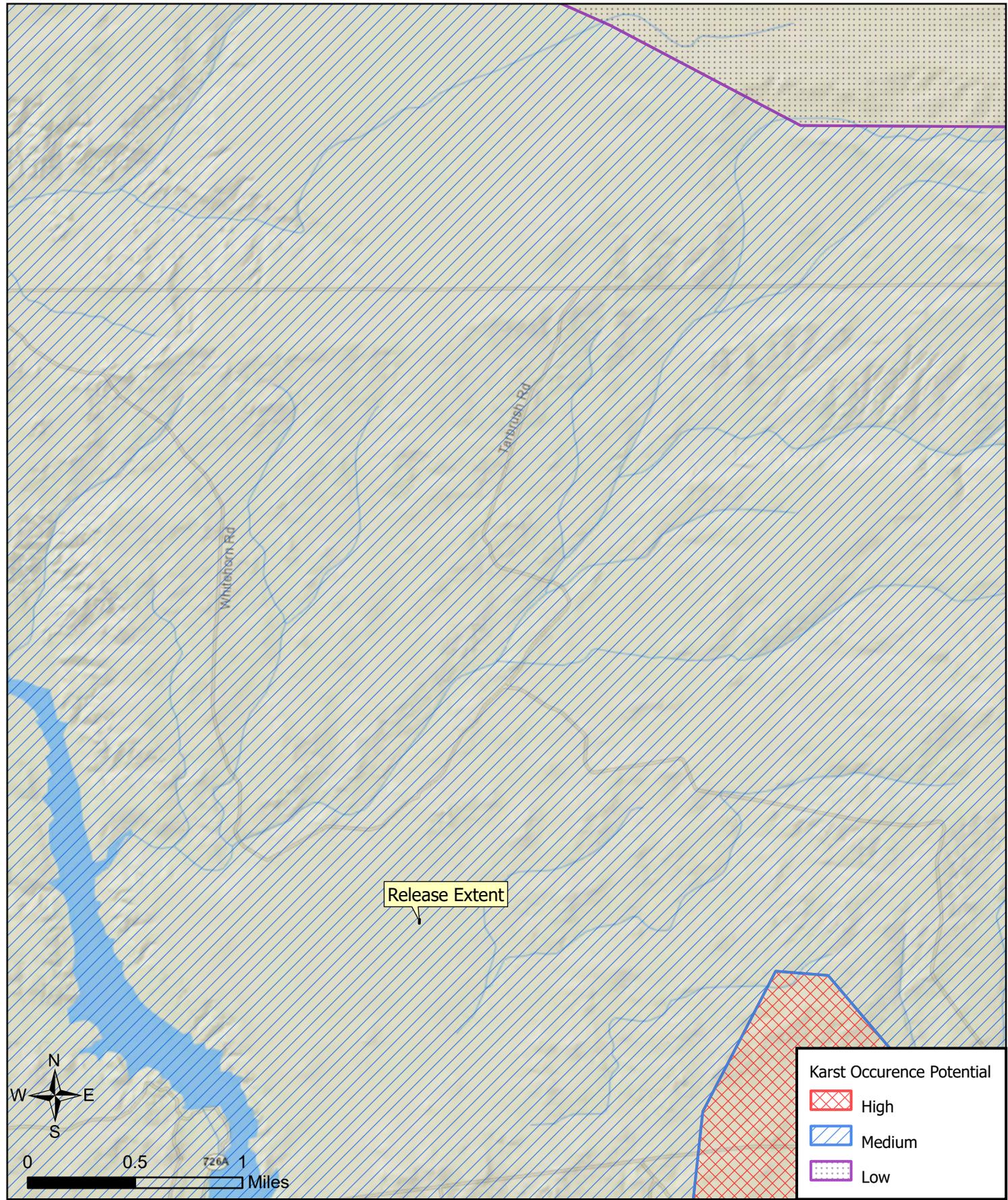
McNabb Partners, LLC
 Hobbs • Carlsbad • Midland

Mines and Minerals
 SJOC: Mobil 22 Fed North Flowline

Incident #: NAB1822243840
 Prj. ID: 20180727-1300-mobil22fed

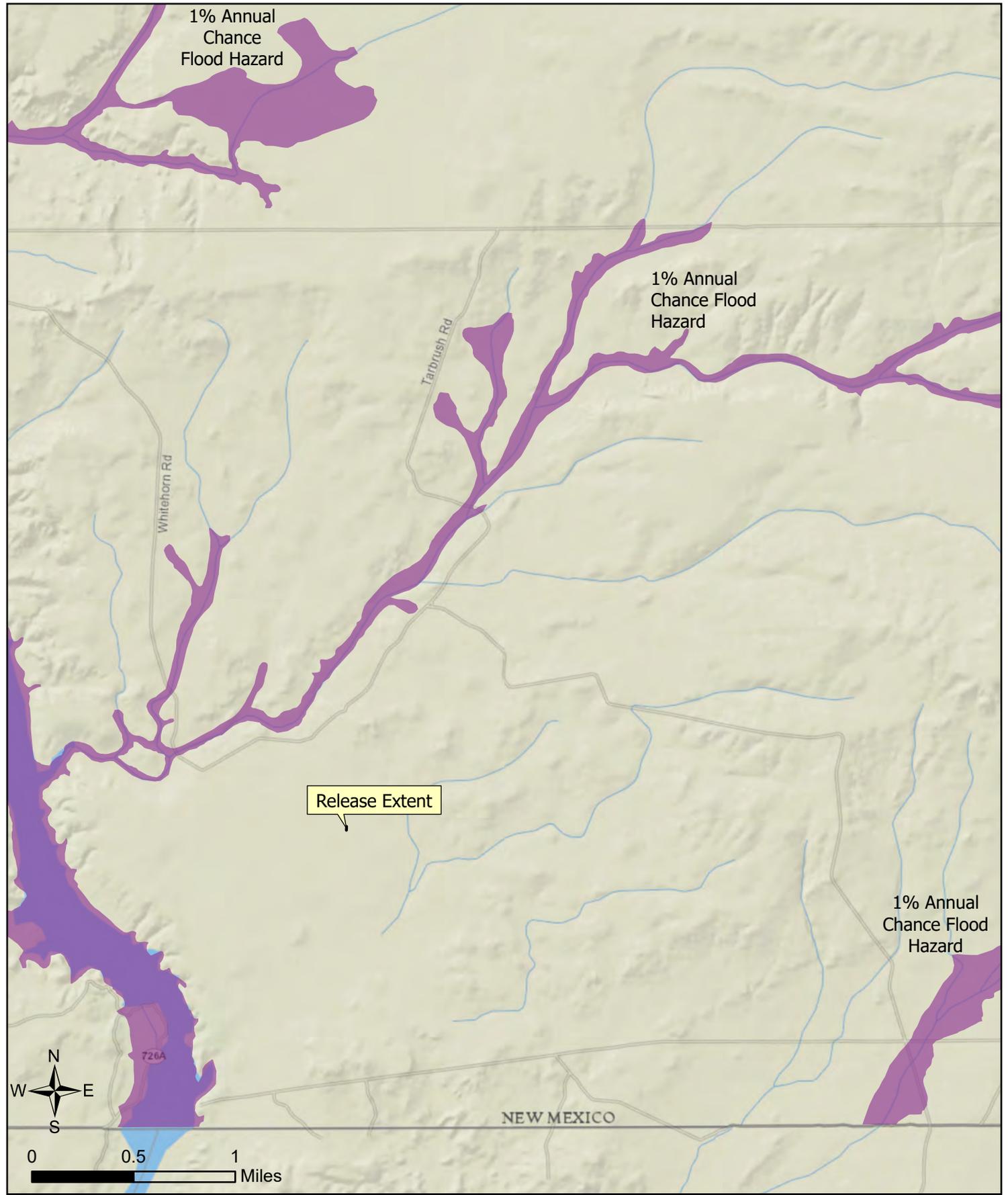
Plate 7

10/16/2023



Karst Occurrence Potential
 SJOC: Mobil 22 Fed North Flowline
 Incident #: NAB1822243840
 Prj. ID: 20180727-1300-mobil22fed

Plate 8
 10/16.2023




McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Flood Hazard
 SJOC: Mobil 22 Fed North Flowline
 Incident #: NAB1822243840
 Prj. ID: 20180727-1300-mobil22fed

Plate 9
 10/16/2023



 McNabb Partners, LLC Hobbs • Carlsbad • Midland	Base Sample Grid and Associated Square Footage SJOC: Mobil 22 Fed North Flowline	Plate 10
	Incident #: NAB1822243840 Prj. ID: 20180727-1300-mobil22fed	10/18/2023



	Sample Point
	Exceeds MCLs
	Source
	Base Grid

McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Sample Point Locations
SJOC: Mobil 22 Fed North Flowline
Incident #: NAB1822243840
Prj. ID: 20180727-1300-mobil22fed

Plate 11
10/18/2023

Tables



October 18, 2023

Table A
Sample Point Coordinates

Incident ID: NAB1822243840
Mobil 22 Federal
Project ID: 20180727-1300-mobil22fed

Sample Point	Latitude	Longitude
GS-01	32.0215337	-103.964549
GS-01 E	32.0214929	-103.964531
GS-01 N	32.0215791	-103.964546
GS-02	32.0214542	-103.964549
GS-02 W	32.0213986	-103.964567
GS-03	32.0213469	-103.964555
GS-03 S	32.0212809	-103.964557

October 18, 2023

Table B
Summary of Analytical

Incident ID: NAB1822243840
Mobil 22 Federal
Project ID: 20180727-1300-mobil22fed

Sample ID	Date	Discrete Depth (Feet)	Top Depth (Feet)	Bottom Depth (Feet)	Location	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Comments	Lab	Lab #
NMOCD Closure Criteria													
0 - 4 feet & "not in-use"						600	--	100	10	50			
> 4 ft or "in-use"						10000	1000	2500	10	50			
GS-01	9/26/2023	1.75			off-site	149	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
GS-01 E	9/26/2023		0	2	off-site	ND	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
GS-01 N	9/26/2023		0	2	off-site	105	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
GS-02	9/26/2023	1.5			off-site	34.5	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
GS-02 W	9/26/2023		0	2	off-site	55.8	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
GS-03	9/26/2023	2			off-site	675	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
GS-03 S	9/26/2023		0	1.75	off-site	563	ND	ND	ND	ND	Hand Auger refusal	Envirotech	E309234
Exceed Closure Criteria													

Appendix A

Communications



McNabb Partners, LLC
Hobbs • Carlsbad • Midland

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1822243840

19958

OPERATOR

Initial Report Final Report

Name of Company	Stephens & Johnson Operating Co.	Contact	Mike Kincaid
Address	P O Box 2249, Wichita Falls, TX 76307	Telephone No.	940-716-5333
Facility Name	Mobil "22" Federal Lease	Facility Type	Oil Well Flowline

Surface Owner	Ross Ranch	Mineral Owner	BLM - Minerals Management	API No.	<i>30-015-24955</i>
---------------	------------	---------------	---------------------------	---------	---------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	22	26S	29E	500	South	470	East	Eddy

Latitude 32.0215687 Longitude -103.9645668 NAD83

NATURE OF RELEASE

Type of Release	Oil and Salt Water	Volume of Release	2 bbls oil, 2 bbls salt water	Volume Recovered	<u>None</u>
Source of Release	Oil Well Flowline	Date and Hour of Occurrence	7/27/18	Date and Hour of Discovery	7/27/18
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Shelly Tucker		
By Whom?	Travis Herron - Pumper	Date and Hour	7/27/18		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

Describe Cause of Problem and Remedial Action Taken.*

Flowline leak. Oil well shut down until flowline can be repaired.

AUG 06 2018

DISTRICT II-ARTESIA O.C.D.

Describe Area Affected and Cleanup Action Taken.*

The area affected is a lease road. The size of the affected area is approximately 3 feet wide and 100 feet long. Contaminated dirt has been removed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>William M. Kincaid</i>	OIL CONSERVATION DIVISION	
Printed Name: William M. Kincaid	Approved by Environmental Specialist:	<i>[Signature]</i>
Title: Petroleum Engineer	Approval Date: <i>8/18/18</i>	Expiration Date: <i>NIA</i>
E-mail Address: mkincaid@sjoc.net	Conditions of Approval:	Attached <i>SP-4905</i>
Date: 7/31/18	Phone: 940-716-5333	<i>See attached</i>

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 08/06/18 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARP-4905 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in Artesia on or before 09/06/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Andrew Parker

From: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Sent: Tuesday, September 19, 2023 11:30 AM
To: Andrew Parker; Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD
Cc: Mike Kincaid; Andrew Cloutier; dwmeyer@verizon.net; Morgan, Crisha A; Zac McNabb
Subject: RE: [EXTERNAL] NAB1822243840 48-hr Confirmation Sampling Notice MOBIL "22" FEDERAL LEASE

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Scott Rodgers • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Andrew Parker <andrew@mcnabbpartners.com>
Sent: Tuesday, September 19, 2023 10:11 AM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Mike Kincaid <MKincaid@sjoc.net>; Andrew Cloutier <ACloutier@hinklelawfirm.com>; dwmeyer@verizon.net; Morgan, Crisha A <camorgan@blm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Zac McNabb <Zac@mcnabbpartners.com>
Subject: [EXTERNAL] NAB1822243840 48-hr Confirmation Sampling Notice MOBIL "22" FEDERAL LEASE

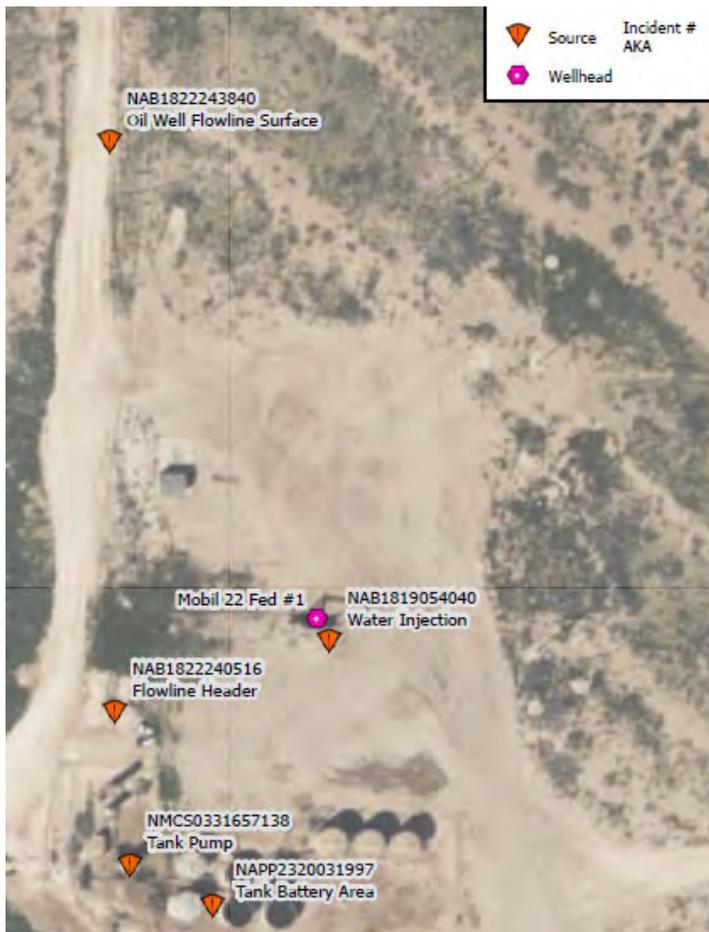
CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Mr. Bratcher:

Incident Number NAB1822243840 is located along the pipeline/lease road north-northwest of the Mobile 22 Fed production site and former tank battery. Therefore, a remediation & closure report will be submitted separately from the remaining incidents referenced below.

As stated on the C-141 dated 07/31/2018, the release was remediated by the time of C-141 submission. No confirmation samples were collected. Please accept this email as the 48-hour confirmation sampling notice. The remediation extent will be sampled per 19.15.29 NMAC where each sample location shall not exceed 200 sq. ft. If confirmation sample results exhibit concentrations above Closure Criteria a remediation plan will be submitted to NMOCD for approval.

Soil sampling is anticipated to commence on Tuesday September 26th.



Incidents on active production site that will be addressed under separate cover:

- nAPP2320031997
- NAB1819054040 (2RP-4839)
- NAB1822240516 (2RP-4909)
- NMCS0331657138

Reproduced from email

From: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Sent: Thursday, June 15, 2023 11:07 AM

...

OCD notes the following open "Incidents" (unauthorized produced fluid releases) associated with this production site:

NMCS0331657138 (Dated 07/16/2004)

NAB1819054040 (Date of discovery listed as 06/24/2018)

NAB1822243840 (Date of discovery listed as 07/27/2018)

NAB1822240516 (Date of discovery listed as 07/26/2018)

These open incidents are to be addressed by SJOC during this investigation/remediation process.

...

Please contact me if you have any questions.

Regards,

Andrew Parker
Environmental Manager
McNabb Partners
c: (970) 570-9535



Appendix B

Well Logs



McNabb Partners, LLC
Hobbs • Carlsbad • Midland



2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

July 8, 2022

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4653 Pod-5-6

To whom it may concern:

Attached please find a well log & record for C-4653 POD-5-6 , and Plugging Record for C-4653 POD-6. , in duplicate. C-4653 POD 1-4 , will not be used, please note that these can be canceled.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive style.

Lucas Middleton

Enclosures: as noted above

OGE DTI AUG 19 2022 9:21:12



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-5 (TW-2)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4653		
	WELL OWNER NAME(S) Stephens & Johnson Operating Co.				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS PO BOX 2249				CITY Wichita Falls	STATE TX	ZIP 7307-2249
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 1	SECONDS 14.42	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LONGITUDE 103	57	52.42	W		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE SE SE Sec. 22 T26S R29E, NMPM							

2. DRILLING & CASING INFORMATION	LICENSE NO. 1249	NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.			
	DRILLING STARTED 7/26/2022	DRILLING ENDED 7/26/2022	DEPTH OF COMPLETED WELL (FT) Soil Boring	BORE HOLE DEPTH (FT) ±72	DEPTH WATER FIRST ENCOUNTERED (FT) ±67			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 67.7	DATE STATIC MEASURED 7/27/2022		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
0	72	±6.5	Soil Boring	--	--	--	--	

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

OSE 3.1 10/2022 2:11:10

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)		ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			Y	N	
	0	25	25	Sand, medium/fine grained, poorly graded, with clay, Dark Brown	Y	✓ N	
	25	45	20	Sand, medium/fine grained, poorly graded, with gravel (0.25"), Tan Brown	Y	✓ N	
	45	64	19	Sand, medium/fine grained, poorly graded, Tan Brown	Y	✓ N	
	64	70	6	Clay, Medium Plastic, with sand and caliche, gypsum Reddish Brown, moist	✓ Y	N	
	70	72	62	Sand, medium/fine grained, poorly graded, with gravel (0.25-.75"), Tan Brown	✓ Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00		

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Secured soil boring with auger and hydrated bentonite, to seal the boring to the ground surface. Pending approval from New Mexico State Oil and Gas Division on completing as a monitoring well.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt, Lucas Middleton	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 Jackie D. Atkins SIGNATURE OF DRILLER / PRINT SIGNEE NAME	8/18/2022 DATE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2	

USE ON AUG 18 2022 #218

WR-20 Well Record and Log-forsign

Final Audit Report

2022-08-18

Created:	2022-08-18
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAXlYfsKCP6cfmOzjy3gfvdCq3Zc7gy0wQ

"WR-20 Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2022-08-18 - 5:25:02 PM GMT- IP address: 64.17.71.25
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2022-08-18 - 5:26:01 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2022-08-18 - 7:49:05 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2022-08-18 - 7:50:46 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.
2022-08-18 - 7:50:46 PM GMT

2022 08 18 2022 7:50:46 PM GMT



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-6 (TW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4653			
	WELL OWNER NAME(S) Stephens & Johnson Operating Co.				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS PO BOX 2249				CITY Wichita Falls	STATE TX	ZIP 7307-2249	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 1	SECONDS 13.71	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE	103	57 52.14	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE SE SE Sec. 22 T26S R29E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 7/25/2022	DRILLING ENDED 7/25/2022	DEPTH OF COMPLETED WELL (FT) Soil Boring	BORE HOLE DEPTH (FT) ±74	DEPTH WATER FIRST ENCOUNTERED (FT) ±67			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 67.1	DATE STATIC MEASURED 7/26/2022		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	74	±6.5	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)		ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			Y	N	
	0	14	14	Clay, Medium Plastic, with sand and caliche, Brown	Y	✓ N	
	14	30	16	Sand, medium/fine grained, poorly graded, increasing clay, Tan	Y	✓ N	
	30	44	14	Clay, Medium Plastic, with sand and caliche, gypsum Reddish Brown	Y	✓ N	
	44	54	10	Sand, medium/fine grained, poorly graded, with clay, Tan	Y	✓ N	
	54	60	6	Clay, Stiff, Medium Plastic, with brown sand Reddish Brown	Y	✓ N	
	60	64	4	Clay, Stiff, Medium Plastic, with cemented sand, Reddish Brown	Y	✓ N	
	64	74	10	Clay, Low Plastic, with sand and caliche, gypsum Reddish Brown, wet	✓ Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):		
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					0.00		

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	Grouted from total depth to surface using augers as tremie Plugged using Type I/II neat cement (5.2 gallons per 94 lb. sack)
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	Shane Eldridge, Cameron Pruitt, Lucas Middleton

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Jackie D. Atkins 8/18/2022 DATE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2	



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4653 POD-6
 Well owner: Stephens & Johnson Operating Co. Phone No.: _____
 Mailing address: PO BOX 2249
 City: Wichita Falls State: Texas Zip code: 7307-2249

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s):
Shane Eldridge
- 4) Date well plugging began: 7/26/2022 Date well plugging concluded: 7/26/2022
- 5) GPS Well Location: Latitude: 32 deg, 1 min, 13.71 sec
Longitude: 103 deg, 57 min, 52.14 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 74 ft below ground level (bgl),
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: 67.1 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 7/1/2022
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

Click to hide News Bulletins

How are we doing? We want to hear from you. Take our quick [survey](#) to tell us what you think.

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

USGS 320112103574501 26S.29E.22.333242

SUMMARY OF ALL AVAILABLE DATA

Well Site

DESCRIPTION:

Latitude 32°01'12", Longitude 103°57'45" NAD27
 Eddy County, New Mexico , Hydrologic Unit 13070001
 Well depth: not determined.
 Land surface altitude: 2,892.0 feet above NGVD29.
 Well completed in "Other aquifers" (N9999OTHER) national aquifer.

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1993-01-05	1993-01-05	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
 Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

- [Questions or Comments](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)

Appendix C

Certificates of Analysis



McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Report to:
Andrew Parker



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

McNabb Partners

Project Name: 20180727-1300-Mobil22

Work Order: E309234

Job Number: 23083-0001

Received: 9/29/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/4/23

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 10/4/23



Andrew Parker
4008 N Grimes #270
Hobbs, NM 88240

Project Name: 20180727-1300-Mobil22
Workorder: E309234
Date Received: 9/29/2023 9:00:00AM

Andrew Parker,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/29/2023 9:00:00AM, under the Project Name: 20180727-1300-Mobil22.

The analytical test results summarized in this report with the Project Name: 20180727-1300-Mobil22 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
GS-01N 0-2FT	5
GS-01E 0-2FT	6
GS-01 1.75FT	7
GS-02W 0-2FT	8
GS-02 1.5FT	9
GS-03S 0-1.75FT	10
GS-03 2FT	11
QC Summary Data	12
QC - Volatile Organics by EPA 8021B	12
QC - Nonhalogenated Organics by EPA 8015D - GRO	13
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	14
QC - Anions by EPA 300.0/9056A	15
Definitions and Notes	16
Chain of Custody etc.	17

Sample Summary

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/04/23 10:36
--	---	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
GS-01N 0-2FT	E309234-01A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.
GS-01E 0-2FT	E309234-02A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.
GS-01 1.75FT	E309234-03A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.
GS-02W 0-2FT	E309234-04A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.
GS-02 1.5FT	E309234-05A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.
GS-03S 0-1.75FT	E309234-06A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.
GS-03 2FT	E309234-07A	Soil	09/26/23	09/29/23	Glass Jar, 2 oz.



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-01N 0-2FT

E309234-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.4 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)		ND	20.0	1	09/30/23	09/30/23
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.8 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)		ND	25.0	1	09/30/23	09/30/23
Oil Range Organics (C28-C36)		ND	50.0	1	09/30/23	09/30/23
<i>Surrogate: n-Nonane</i>		96.6 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: BA		Batch: 2340007
Chloride	105	20.0	1	10/02/23	10/02/23	



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-01E 0-2FT

E309234-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.8 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/30/23	09/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.2 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)	ND	25.0	1	09/30/23	09/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/30/23	09/30/23	
<i>Surrogate: n-Nonane</i>		98.5 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2340007
Chloride	ND	20.0	1	10/02/23	10/02/23	



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-01 1.75FT

E309234-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.4 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/30/23	09/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		87.3 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)	ND	25.0	1	09/30/23	09/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/30/23	09/30/23	
<i>Surrogate: n-Nonane</i>		92.6 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2340007
Chloride	149	20.0	1	10/02/23	10/02/23	



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-02W 0-2FT

E309234-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		93.7 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/30/23	09/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.5 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)	ND	25.0	1	09/30/23	09/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/30/23	09/30/23	
<i>Surrogate: n-Nonane</i>		96.9 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2340007
Chloride	55.8	20.0	1	10/02/23	10/02/23	



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-02 1.5FT

E309234-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.3 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/30/23	09/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		85.8 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)	ND	25.0	1	09/30/23	09/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/30/23	09/30/23	
<i>Surrogate: n-Nonane</i>		95.0 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2340007
Chloride	34.5	20.0	1	10/02/23	10/02/23	



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-03S 0-1.75FT

E309234-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		95.0 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/30/23	09/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.9 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)	ND	25.0	1	09/30/23	09/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/30/23	09/30/23	
<i>Surrogate: n-Nonane</i>		92.2 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2340007
Chloride	563	20.0	1	10/02/23	10/02/23	



Sample Data

McNabb Partners 4008 N Grimes #270 Hobbs NM, 88240	Project Name: 20180727-1300-Mobil22 Project Number: 23083-0001 Project Manager: Andrew Parker	Reported: 10/4/2023 10:36:38AM
--	---	--

GS-03 2FT

E309234-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Benzene	ND	0.0250	1	09/30/23	09/30/23	
Ethylbenzene	ND	0.0250	1	09/30/23	09/30/23	
Toluene	ND	0.0250	1	09/30/23	09/30/23	
o-Xylene	ND	0.0250	1	09/30/23	09/30/23	
p,m-Xylene	ND	0.0500	1	09/30/23	09/30/23	
Total Xylenes	ND	0.0250	1	09/30/23	09/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		95.1 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2339120
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/30/23	09/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		87.6 %	70-130	09/30/23	09/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: KM		Batch: 2339124
Diesel Range Organics (C10-C28)	ND	25.0	1	09/30/23	09/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	09/30/23	09/30/23	
<i>Surrogate: n-Nonane</i>		100 %	50-200	09/30/23	09/30/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: BA		Batch: 2340007
Chloride	675	20.0	1	10/02/23	10/02/23	



QC Summary Data

McNabb Partners	Project Name: 20180727-1300-Mobil22	Reported:
4008 N Grimes #270	Project Number: 23083-0001	
Hobbs NM, 88240	Project Manager: Andrew Parker	10/4/2023 10:36:38AM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2339120-BLK1)

Prepared: 09/30/23 Analyzed: 09/30/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.52		8.00		94.0	70-130			

LCS (2339120-BS1)

Prepared: 09/30/23 Analyzed: 09/30/23

Benzene	4.77	0.0250	5.00		95.4	70-130			
Ethylbenzene	4.60	0.0250	5.00		92.1	70-130			
Toluene	4.79	0.0250	5.00		95.7	70-130			
o-Xylene	4.75	0.0250	5.00		95.0	70-130			
p,m-Xylene	9.54	0.0500	10.0		95.4	70-130			
Total Xylenes	14.3	0.0250	15.0		95.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.57		8.00		94.7	70-130			

Matrix Spike (2339120-MS1)

Source: E309234-04

Prepared: 09/30/23 Analyzed: 09/30/23

Benzene	4.64	0.0250	5.00	ND	92.9	54-133			
Ethylbenzene	4.50	0.0250	5.00	ND	90.1	61-133			
Toluene	4.67	0.0250	5.00	ND	93.4	61-130			
o-Xylene	4.61	0.0250	5.00	ND	92.2	63-131			
p,m-Xylene	9.34	0.0500	10.0	ND	93.4	63-131			
Total Xylenes	14.0	0.0250	15.0	ND	93.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.52		8.00		94.0	70-130			

Matrix Spike Dup (2339120-MSD1)

Source: E309234-04

Prepared: 09/30/23 Analyzed: 09/30/23

Benzene	4.91	0.0250	5.00	ND	98.2	54-133	5.55	20	
Ethylbenzene	4.75	0.0250	5.00	ND	95.0	61-133	5.34	20	
Toluene	4.93	0.0250	5.00	ND	98.6	61-130	5.38	20	
o-Xylene	4.87	0.0250	5.00	ND	97.4	63-131	5.52	20	
p,m-Xylene	9.84	0.0500	10.0	ND	98.4	63-131	5.18	20	
Total Xylenes	14.7	0.0250	15.0	ND	98.1	63-131	5.29	20	
Surrogate: 4-Bromochlorobenzene-PID	7.59		8.00		94.9	70-130			



QC Summary Data

McNabb Partners	Project Name:	20180727-1300-Mobil22	Reported:
4008 N Grimes #270	Project Number:	23083-0001	
Hobbs NM, 88240	Project Manager:	Andrew Parker	10/4/2023 10:36:38AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2339120-BLK1)

Prepared: 09/30/23 Analyzed: 09/30/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.95		8.00		86.9	70-130			

LCS (2339120-BS2)

Prepared: 09/30/23 Analyzed: 09/30/23

Gasoline Range Organics (C6-C10)	39.9	20.0	50.0		79.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.98		8.00		87.3	70-130			

Matrix Spike (2339120-MS2)

Source: E309234-04

Prepared: 09/30/23 Analyzed: 09/30/23

Gasoline Range Organics (C6-C10)	43.7	20.0	50.0	ND	87.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.11		8.00		88.9	70-130			

Matrix Spike Dup (2339120-MSD2)

Source: E309234-04

Prepared: 09/30/23 Analyzed: 09/30/23

Gasoline Range Organics (C6-C10)	42.9	20.0	50.0	ND	85.8	70-130	1.83	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.00		8.00		87.5	70-130			



QC Summary Data

McNabb Partners	Project Name:	20180727-1300-Mobil22	Reported:
4008 N Grimes #270	Project Number:	23083-0001	
Hobbs NM, 88240	Project Manager:	Andrew Parker	10/4/2023 10:36:38AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2339124-BLK1)

Prepared: 09/30/23 Analyzed: 09/30/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n-Nonane</i>	66.4		50.0		133	50-200			

LCS (2339124-BS1)

Prepared: 09/30/23 Analyzed: 09/30/23

Diesel Range Organics (C10-C28)	260	25.0	250		104	38-132			
Surrogate: <i>n-Nonane</i>	66.7		50.0		133	50-200			

Matrix Spike (2339124-MS1)

Source: E309239-03

Prepared: 09/30/23 Analyzed: 09/30/23

Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
Surrogate: <i>n-Nonane</i>	48.0		50.0		96.0	50-200			

Matrix Spike Dup (2339124-MSD1)

Source: E309239-03

Prepared: 09/30/23 Analyzed: 09/30/23

Diesel Range Organics (C10-C28)	256	25.0	250	ND	103	38-132	2.60	20	
Surrogate: <i>n-Nonane</i>	47.2		50.0		94.3	50-200			



QC Summary Data

McNabb Partners	Project Name:	20180727-1300-Mobil22	Reported:
4008 N Grimes #270	Project Number:	23083-0001	
Hobbs NM, 88240	Project Manager:	Andrew Parker	10/4/2023 10:36:38AM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec %	Rec Limits	RPD %	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2340007-BLK1)

Prepared: 10/02/23 Analyzed: 10/02/23

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2340007-BS1)

Prepared: 10/02/23 Analyzed: 10/02/23

Chloride	248	20.0	250		99.3	90-110			
----------	-----	------	-----	--	------	--------	--	--	--

Matrix Spike (2340007-MS1)

Source: E309233-01

Prepared: 10/02/23 Analyzed: 10/02/23

Chloride	467	20.0	250	275	77.2	80-120			M2
----------	-----	------	-----	-----	------	--------	--	--	----

Matrix Spike Dup (2340007-MSD1)

Source: E309233-01

Prepared: 10/02/23 Analyzed: 10/02/23

Chloride	502	20.0	250	275	90.8	80-120	7.06	20	
----------	-----	------	-----	-----	------	--------	------	----	--

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

McNabb Partners	Project Name:	20180727-1300-Mobil22	
4008 N Grimes #270	Project Number:	23083-0001	Reported:
Hobbs NM, 88240	Project Manager:	Andrew Parker	10/04/23 10:36

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: <u>McNabb Partners</u>		Bill To		Lab Use Only		TAT			EPA Program							
Project: <u>20180727-1300-Mobi22</u>		Attention: <u>McNabb Partners</u>		Lab WO# <u>E309234</u>		Job Number <u>23083-0001</u>			1D	2D	3D	Standard	CWA	SDWA		
Project Manager: <u>Andrew Parker</u>		Address: <u>4008 N. Grimes, PMB 270</u>		City, State, Zip <u>Hobbs, NM 88240</u>		Analysis and Method					RCRA					
Address:		Phone: <u>575-397-0050</u>		Email: <u>kim@mcnabbpartners.com</u>							State					
City, State, Zip											NM	CO	UT	AZ	TX	
Phone: <u>970-570-9535</u>																
Email: <u>andrew@mcnabbpartners.com</u>																
Report due by:																

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	TCEQ 1005-TX	Remarks
10:15	9/26	Soil	1	GS-01N 0-2 FT	1							X		
11:45			1	GS-01E 0-2 FT	2									
13:00			1	GS-01 1.75 FT	3									
11:20				GS-02 W 0-2 FT	4									
13:15				GS-02 1.5 FT	5									
10:50				GS-03 S 0-1.75 FT	6									
12:20				GS-03 2 FT	7									

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Andrew Parker

Relinquished by: (Signature) <u>Challasha</u>	Date <u>9/28/23</u>	Time <u>07:15</u>	Received by: (Signature) <u>Michelle Gandy</u>	Date <u>9-28-23</u>	Time <u>1045</u>	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Gandy</u>	Date <u>9-28-23</u>	Time <u>1515</u>	Received by: (Signature) <u>Keenan Gandy</u>	Date <u>9-28-23</u>	Time <u>1515</u>	
Relinquished by: (Signature) <u>Keenan Gandy</u>	Date <u>9-28-23</u>	Time <u>2111</u>	Received by: (Signature) <u>Andrew Parker</u>	Date <u>9-29-23</u>	Time <u>900</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Envirotech Analytical Laboratory

Printed: 9/30/2023 11:16:15AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: McNabb Partners	Date Received: 09/29/23 09:00	Work Order ID: E309234
Phone: (970) 570-9535	Date Logged In: 09/29/23 12:48	Logged In By: Alexa Michaels
Email: andrew@mcnabbpartners.com	Due Date: 10/05/23 17:00 (4 day TAT)	

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
- 2. Does the number of samples per sampling site location match the COC? Yes
- 3. Were samples dropped off by client or carrier? Yes
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: Courier

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Comments/Resolution

Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

- 7. Was a sample cooler received? Yes
- 8. If yes, was cooler received in good condition? Yes
- 9. Was the sample(s) received intact, i.e., not broken? Yes
- 10. Were custody/security seals present? No
- 11. If yes, were custody/security seals intact? NA
- 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

- 13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

- 14. Are aqueous VOC samples present? No
- 15. Are VOC samples collected in VOA Vials? NA
- 16. Is the head space less than 6-8 mm (pea sized or less)? NA
- 17. Was a trip blank (TB) included for VOC analyses? NA
- 18. Are non-VOC samples collected in the correct containers? Yes
- 19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

- 20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
- 22. Are sample(s) correctly preserved? NA
- 24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
- 27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
- 29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

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 280817

CONDITIONS

Operator: STEPHENS & JOHNSON OP CO P.O. Box 2249 Wichita Falls, TX 76307	OGRID: 19958
	Action Number: 280817
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation plan approved. Submit a report via the OCD permitting portal by March 4, 2024.	10/31/2023