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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

)

Page 1 of 25

Incident ID	nAPP2200758512
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Solaris Water, LLC	OGRID 371643	
Contact Name Rob Kirk	^{Contact Telephone} O 575- 300-5155 C 469-978-5620	
Contact email rob.kirk@ariswater.com	Incident # (assigned by OCD)	
Contact mailing address 3305 Boyd Drive, Carlsbad, NM 88220		

Location of Release Source

Latitude 32.06168

Longitude -103.97983

(NAD 83 in decimal degrees to 5 decimal places)

Site Name JR Horz Booster Pump	Site Type Booster Pump
Date Release Discovered 01/07/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	10	26S	29E	Eddy

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 93.5	Volume Recovered (bbls) 48
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

At this booster pump station, the pump was reported to be recirculating water and the temperature dropped below freezing. The pump head failed and produced water was released.

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Page 2

Page 2 of 25

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? 93.5 BBLs of Produced Water was released.			
Ves 🗌 No				
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?			
Rob Kirk notified by NMOCD Web Portal, emails to Aretsia office of OCD				

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 \checkmark The source of the release has been stopped.

 \checkmark The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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: Rob Kirk	Title: VP & GM, HSE & Compliance
Signature:	Date: 01/20/2023
email: _rob.kirk@ariswater.com	Telephone: 0 575- 300-5155 C 469-978-5620
OCD Only	
Received by:	Date:

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?	(ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 📈 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 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)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 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?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🔽 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🔽 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🔽 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🔽 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🔽 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🔽 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
- $\overline{\mathbf{\nabla}}$ Data table of soil contaminant concentration data
- \checkmark Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- **V** 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.

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Page 3

Form C-141	23 3:30:00 PM State of New Mexico			Page 4 o
	Oil Conservation Division		Incident ID	nAPP2200758512
Oil Conservation Div	On Conservation Divisio	511	District RP	
			Facility ID	
			Application ID	
regulations all operators are public health or the environ failed to adequately investig	permation given above is true and complete to e required to report and/or file certain release ment. The acceptance of a C-141 report by the gate and remediate contamination that pose a	notifications and perform c he OCD does not relieve th threat to groundwater, surf	orrective actions for rele e operator of liability sh ace water, human health	eases which may endanger ould their operations have or the environment. In
audition, OCD acceptance (and/or regulations. Printed Name: Rob Ki Signature: Rob Ki email: rob.kirk@at	R Mad		HSE & Complia	ance

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Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

	Page 5 of	25
Incident ID	nAPP2200758512	
District RP		
Facility ID		
Application ID		

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points \square 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. ______ Title: VP & GM, HSE & Compliance Printed Name: Rob Kirk _____ Date: 01/20/2023 Signature: Telephone: O 575- 300-5155 C 469-978-5620 email: rob.kirk@ariswater.com **OCD Only** Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Confirmation samples should be The excavation should be backfilled to 4 feet below surface with clean material, liner installed, and then backfilled to surface with clean material. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Samples must be collected every 200 ft2. Please include the results of the exploratory borehole in the closure report. methods. Contamination on roads will need to be sampled and remediated if present. The liner is only approved under the condition that as much contaminated soil is safely removed as possible. denied. Please safely remove the contaminated soil around high pressure lines with alternative The Remediation Plan is Conditionally Approved. Variance for terminating remedial efforts 4' is A closure report will need to be completed and uploaded within 90 days. .

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The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you, Robert Hamlet 575-748-1283 <u>Robert Hamlet@emnrd.nm.gov</u> New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive

1220 South St. Francis Drive Santa Fe, NM 87505 Aris Midstream LLC JR Horz Booster Pump D, S10, T26S, R29E NMOCD Reference # nAPP2200758512 Terracon Project # AR227020



Extension Request

Attn: Mr. Rob Kirk 469-978-5620 rob.kirk@ariswater.com

RE: Extension Request

JR Horz Booster Pump Unit D, Section 10, Township 26 South, Range 29 East Eddy County, New Mexico Terracon Project No. AR227020

Dear Mr. Kirk,

Terracon Consultants, Inc. (Terracon) is pleased to submit our Extension Request for the site referenced above. Terracon recommends the following actions be taken to achieve the protection of fresh water and the environment in accordance with NMOCD regulations. Terracon developed the Extension Request following the approval of the Remedial Action Plan approved on March 08, 2023.

Action Items

Completed Actions

- Following the approval of Terracon's remedial action plan, an extensive delineation plan was executed to accurately quantify the amount of impacted material and develop a cut plan to accommodate the complexities of this site. Vertical and horizontal delineation of the impact was divided into 657 sample locations and covered approximately 131,400 ft² of the total area.
- Aris Water Solutions acquired a permit and installed an exploratory boring to establish the depth of groundwater at the site. The boring was dry at 110 feet below the grade surface after 72 hours.
- 3) Terracon completed the remediation of the inferred impacted material on the production pad to the north of the initial release.
- 4) During Terracon's extensive delineation activities, it was inferred that the area with the highest chloride impacts was a lined historic pit southeast of the pad site, which subsequently halted sampling activities in that area.
- 5) Terracon additionally reduced sampling activities around the multiple high-pressure lines in the area as pipeline personnel were not available to oversee sampling activities.

Aris Midstream LLC JR Horz Booster Pump D, S10, T26S, R29E NMOCD Reference # nAPP2200758512 Terracon Project # AR227020



Variance Request

- 1) Terracon is seeking a variance to leave the historical encapsulated pit in place to reduce additional impacts and protect fresh water.
- 2) Terracon is seeking an extension of 90 days to accommodate the completion of the extensive sampling needed to complete the remediation and complete the previously approved RAP. It should be noted that within the original RAP Terracon requested a 6-month window to complete this large and complex project.

Terracon appreciates this opportunity to provide environmental services to Aris Water Solutions. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely, Terracon Consultants, Inc.

Joseph Guesnier Senior Staff Scientist Office Manager - Carlsbad Erin Loyd, P.G. (TX) Senior Principal Office Manager – Lubbock

Attachments:

Appendix A – Exhibits

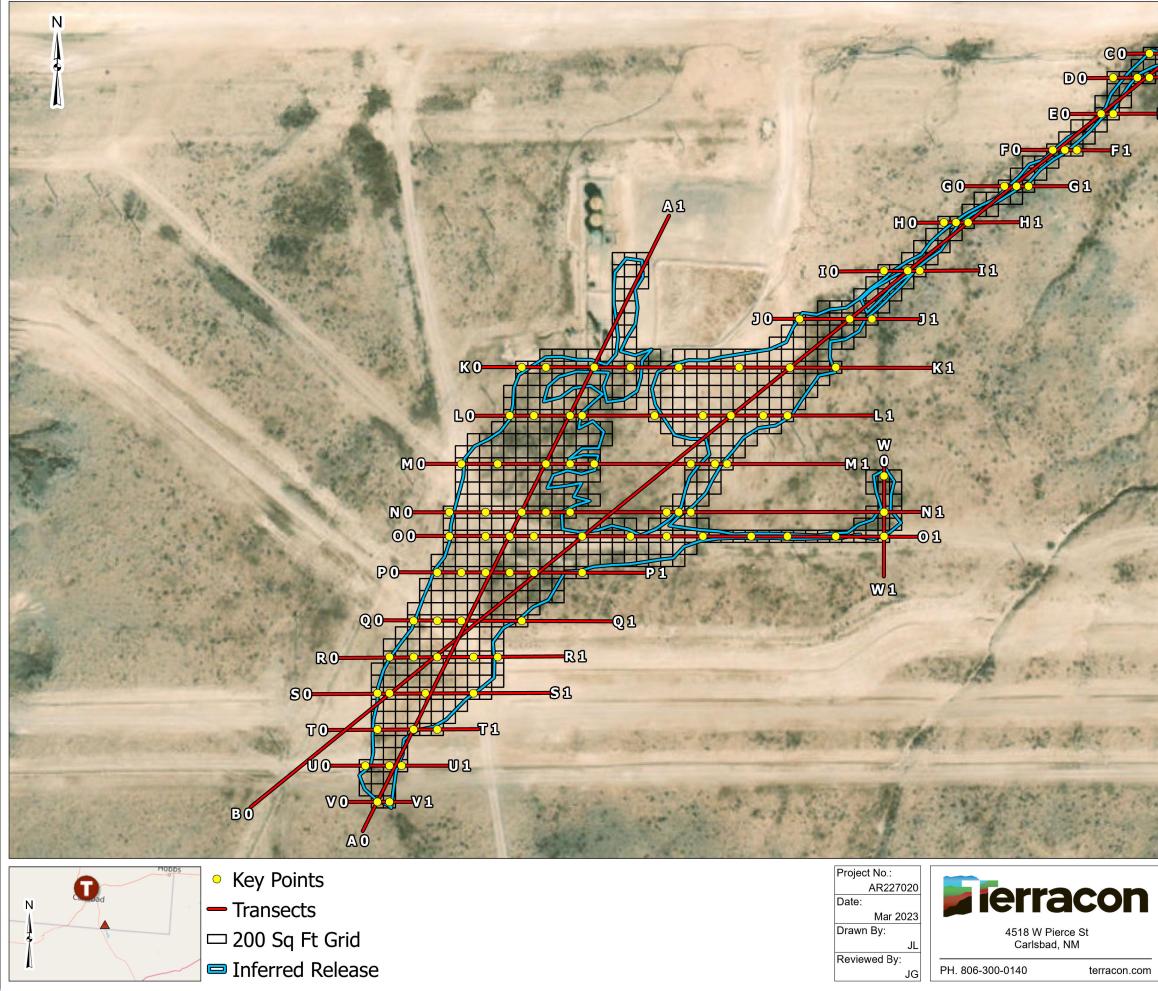
- Figure 1 Transects with Key Points
- Figure 2 200 Sq Ft Grid (Section A)
- Figure 3 200 Sq Ft Grid (Section B)
- Figure 4 200 Sq Ft Grid (Section C)
- Figure 5 Soil Boring / Monitoring Well Log

Appendix B – Tables, Procedures, and Figures

Table 1 – Soil Sample Analytical Results (On Pad)

Appendix C – Photographic Log

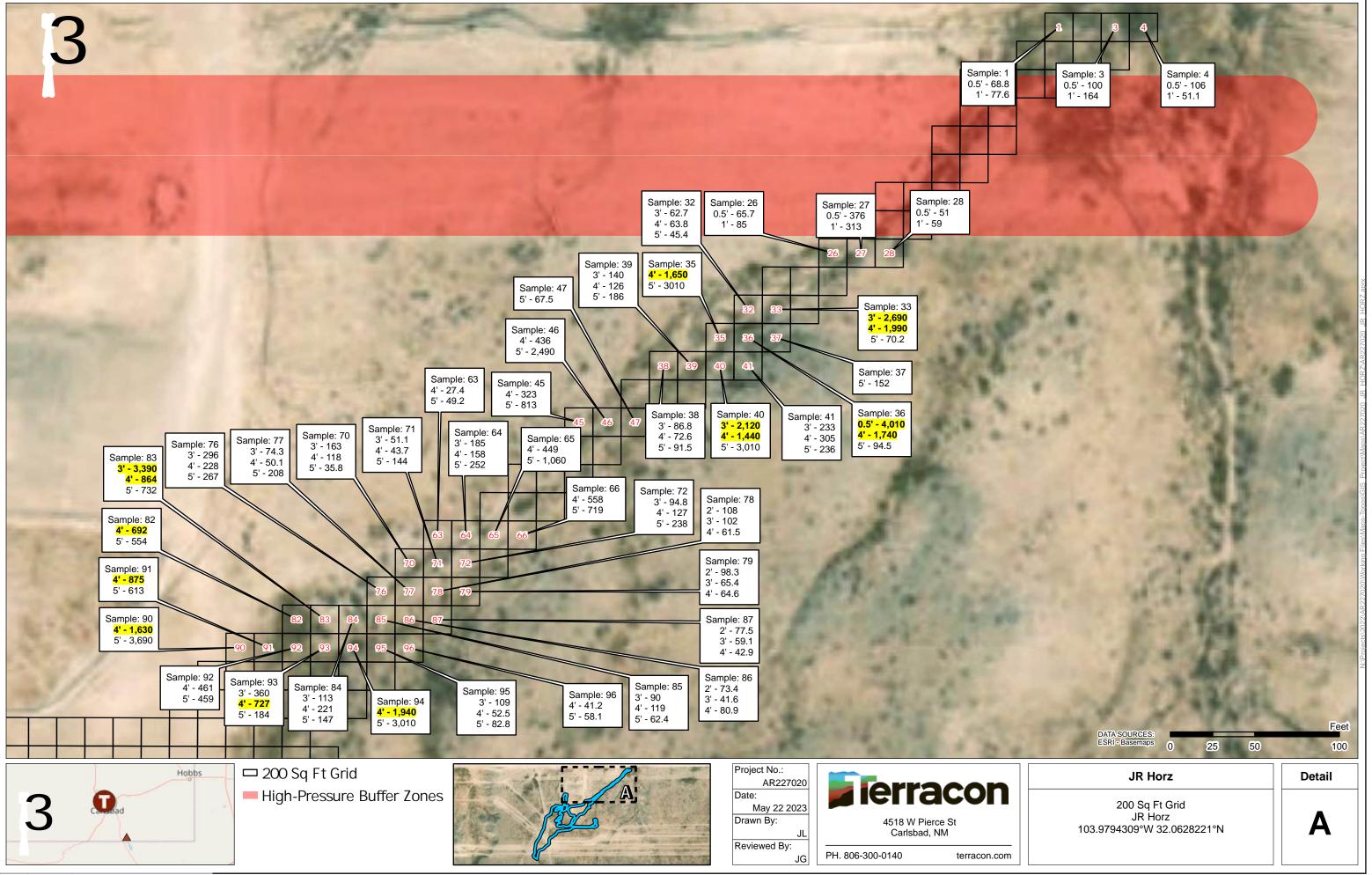
APPENDIX A – EXHIBITS



B1	Transect	Box		Transect	Box	
	В	1	1	М	384	
	B	3	-	M	387	-
C1	B	4	-	м	389	3
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and the life is the	C	12		M	392	
11	c c	9	den-	M	393	
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· V. The manual	D	19	Mail	M	396	1
and the second se	F	26	23	N	421	1
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· Sap	J	144	-	0	512	
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the self war and an and	K	241	Julia .	Q	581	
Silles Provide and the set	K	244	1	Q	584	2
and the second s	K	245		Q	586	
Contraction of the second second	K	246	-	R	609	
	K	250	_	R	610	
the second second second	K	252		R	613	
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The second second second second	М	324		U	649	
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Transects with Ke	y Points	5				
JR Horz				1		
103.9794309°W 32.0	U62822	1°N				

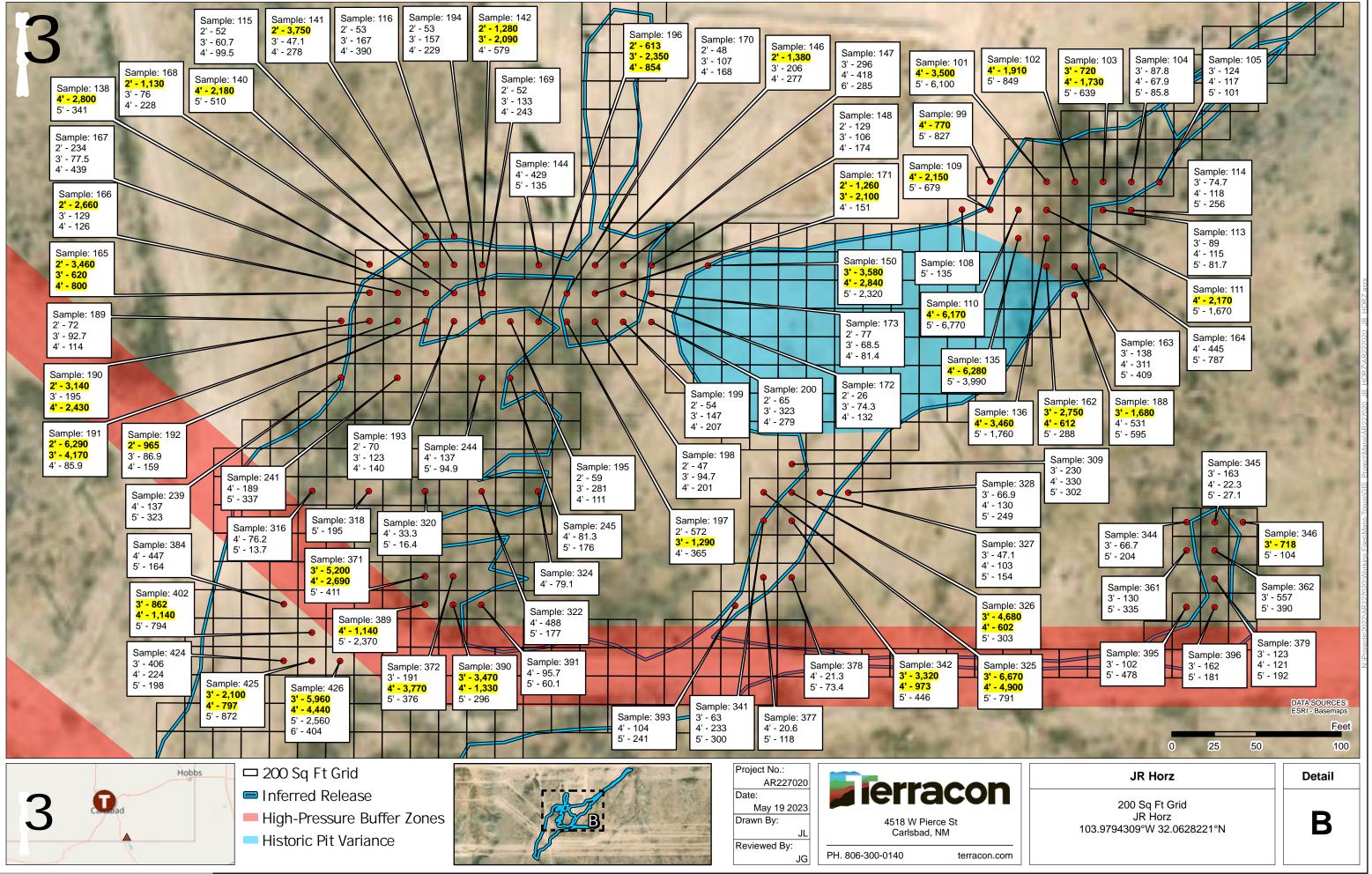
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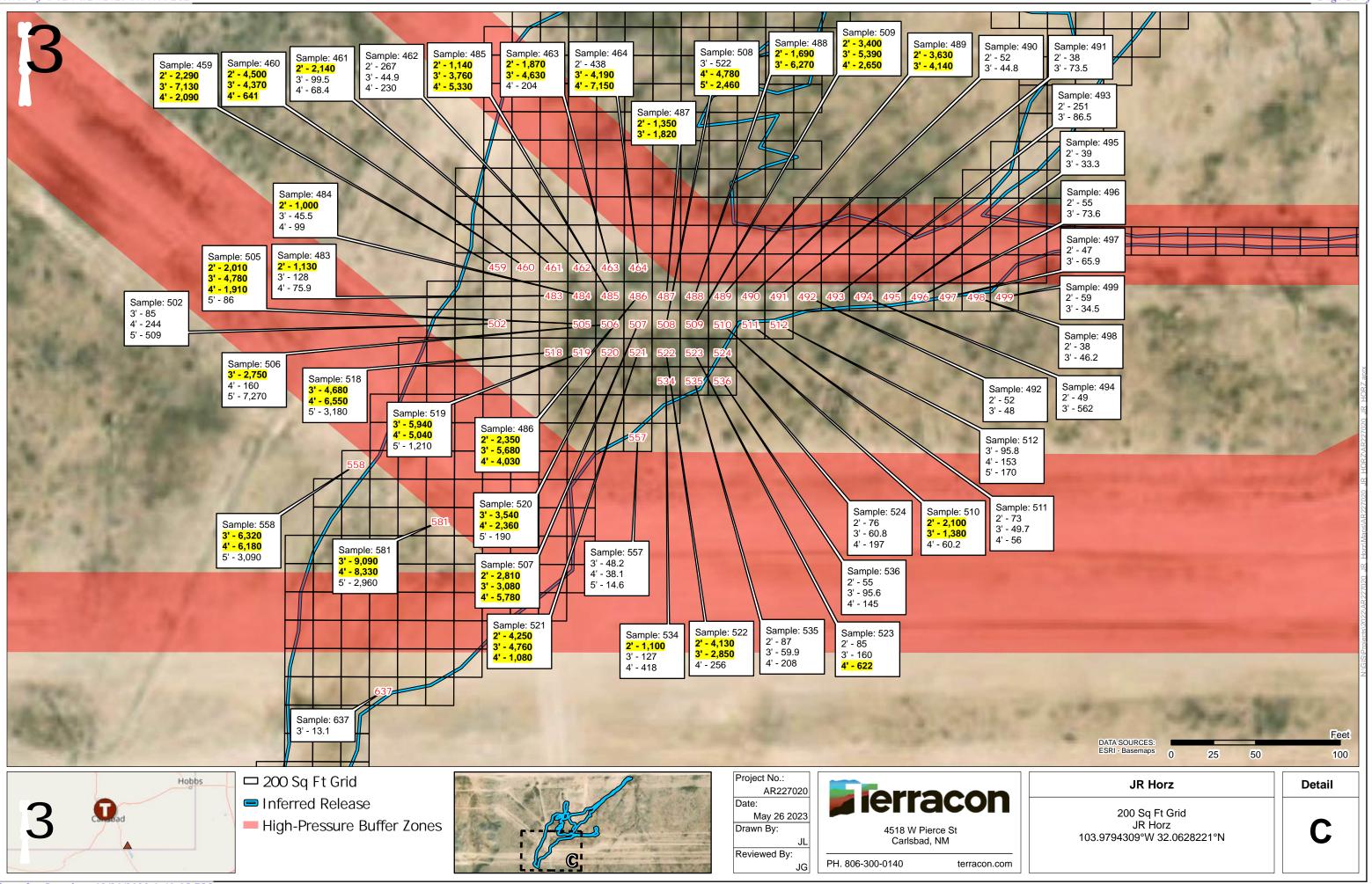
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SOIL BORING / MONITORING WELL LOG

.

PROJECT: JR Horz		DRILLING COMPANY:	
PROJECT NUMBER: AF	R227020	DRILLER:	
CLIENT:		DRILLING METHOD:	
BORING / WELL NUMBER			
TOTAL DEPTH: 110			
TOP OF CASING:		CASING: Diam Length Type	
FIELD PERSONNEL: JU	stin Friend		
LOCATION: 32.0616	78, -103.979788	PAGI	E 1 of
DEPTH (FT) SOIL SYMBOL WELL CONSTRUCTION	PID SAMPLES SAMPLE INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)
	NA	Silty sand with some gravel (Grain size: Silt to V-fine sand and gravel) Light brown	0
10	NA 1	Silty sand with some gravel (Grain size: Silt to V-fine sand and gravel) Light brown	
20	NA 1	Silty sand with gravel (Grain size: Silt to V-fine sand and gravel) Light brown	
30	NA 1	Gravel and some clay (Grain size:Clay and gravel) Light brown	
40	NA 1	Silty sand (Grain size: Silt to V-fine sand) Light brown	
50	NA 1	Silty sand (Grain size: Silt to V-fine sand) Light brown	
60	NA 1	Clayey sand (Grain size: Clay to V-fine sand) Light brown	
	nple interval 10 feet	SED SEPARATELY FROM THE ORIGINAL REPORT.	raci

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SOIL BORING / MONITORING WELL LOG

PROJECT: JR Horz				DRILLING COMPANY:		_
PROJECT NUMBER: AR	22702	20				_
CLIENT:				DRILLING METHOD:		_
BORING / WELL NUMBER:				BORE HOLE DIAMETER:		_
TOTAL DEPTH: <u>110</u>				SCREEN: Diam Length Slot Size		_
TOP OF CASING:				CASING: Diam. Length Type		_
FIELD PERSONNEL: JUS	stin Frie	end		DATE DRILLED: <u>4/12/2023</u>		_
LOCATION: 32.0616	<u>578, -1</u>	03.979	9788		PAGE 2	2
DEPTH (FT) SOIL SYMBOL WELL CONSTRUCTION	PID	SAMPLES SAMPLE	INTERVAL DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)	
70	NA	1		Clayey sand (Grain size: Clay to V-fine sand)	70)
	NA	1		Light brown Fine silty sand, some clay (Grain size: Clay to fine sand)		
	NA	1		Tan/light brown Very fine sand with some clay and gravel (Grain size: Clay to fine sand		
90				and gravel) Brown		<u> </u>
	NA	1		Clayey sand (Grain size: Clay to fine sand) Light brown		00
110	NA	1		Clayey sand (Grain size: Clay to fine sand)	11	10
				Light brown The end of the bit had traces of clay and no moisture		
REMARKS: Samp THIS LOG S				Gauging the bore hole has reviled no traces of ground water at the location. Gauging was compleated at 11:15 AM 4/17/2023		
REMARKS: Samp THIS LOG S	ple interv SHOULI			SEPARATELY FROM THE ORIGINAL REPORT.	erracol	ח

APPENDIX B – TABLES, PROCEDURES, AND FIGURES

		SOIL S		TABLE 1 TICAL RESULTS - BTEX ¹ , Chloride ² , and JR Horz racon Project No. AR227020	TPH ³			
Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)		TPH (8015M) (mg/kg)	
	,					GRO	DRO	EXT DRO
			Confir	mation Wall Samples (On Pad)				
N-SW-1	0-4'	Composite	03/21/23	<slds< td=""><td>3,110</td><td>ND</td><td>ND</td><td>ND</td></slds<>	3,110	ND	ND	ND
E-SW-1	0-4'	Composite	03/21/23	<slds< td=""><td>2,090</td><td>ND</td><td>ND</td><td>ND</td></slds<>	2,090	ND	ND	ND
E-SW-2	0-4'	Composite	03/21/23	<slds< td=""><td>969</td><td>ND</td><td>ND</td><td>ND</td></slds<>	969	ND	ND	ND
S-SW-1	0-4'	Composite	03/21/23	<slds< td=""><td>1,550</td><td>ND</td><td>ND</td><td>ND</td></slds<>	1,550	ND	ND	ND
W-SW-1	0-4'	Composite	03/21/23	<slds< td=""><td>3,000</td><td>ND</td><td>ND</td><td>ND</td></slds<>	3,000	ND	ND	ND
W-SW-2	0-4'	Composite	03/21/23	<slds< td=""><td>4,420</td><td>ND</td><td>ND</td><td>ND</td></slds<>	4,420	ND	ND	ND
(Applicable	NMOCD Reclama for Soils from the Surfa		le Surface)	Benzene - 10 Total BTEX - 50	20,000		2,500	
NN	IOCD Remediation and (Applicable for S Greater than 4 ft. Bel	oils at Depths	s ⁵	Benzene - 10 Total BTEX - 50	20,000		2,500	

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/MRO)

 New Mexico Administration Code (NMAC) Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use) for soils extending to 4 ft. bgs

5. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards are proposed in 19.15.29.12 NMAC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = Not Applicable

Bold and Highlight denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Reclamation and/or Remediation and Delineation Standard

.

APPENDIX C – PHOTOGRAPHIC LOG





PHOTO 2: View of the site during excavation from the south looking north



PHOTO 3: View of the completed excavation from the south looking north





PHOTO 4: View of the excavation from the north looking south



PHOTO 5: View of the excavation from the northeast looking southwest.





PHOTO 6: View of the sample location 182, with liner exposed in the sidewall



PHOTO 7: View of the sample location 407, with liner exposed in the sidewall.





PHOTO 4: View of the sample location 250, with liner exposed in the sidewall.





PHOTO 5: View of the excavation from the northeast looking southwest.

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

Operator: C	OGRID:
SOLARIS WATER MIDSTREAM, LLC	371643
907 Tradewinds Blvd, Suite B	Action Number:
Midland, TX 79706	233518
3	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By Condition Condition Date A 90-day Extension Request is Approved. If the fluids from the release entered the old legacy reserve pit, the spill and the legacy reserve pit will need to be rhamlet 12/21/2023 fully delineated and remediated. If the release can be vertically/horizontally delineated before it reaches the reserve pit, the variance is approved to leave the pit in place.

CONDITIONS

Action 233518