

HUNGRY HORSE, LLC

3709 S. Eunice HWY
P.O. Box 1058
Hobbs, NM 88241
Office: 575-393-3386
Fax: 575-391-4585
info@hungry-horse.com

DIRT WORK * ON-SITE REMEDIATION
SOIL TESTING * EXCAVATION * ELECTRICAL

28Sept15

To: Mike Bratcher, New Mexico Oil Conservation Division
Shelly Tucker, Bureau of Land Management
Reference: Remediation Work Plan (Revised)
Operator: Devon Energy Production Company
Location: North Pure Gold 8 Federal 11 SWD
API: 30-015-32619
Legals: UL. J, Sec. 8, T23S, R 31E, Eddy County NM
GPS: 32.31545, -103.79585

Site Information

This site is located north of New Mexico Highway 128 and west of WIPP Road approximately four miles due south of the WIPP Site. The vegetation in this area consist mainly of native grasses, yucca plants, and mesquite bushes. The terrain of this area is made up mostly of small sand dunes and with no predominant terrain feature present. Based upon the Eddy County Depth to Groundwater Map, depth to ground water appears to be approximately 100'. New Mexico Office of the State Engineer's website list no water data for the section, township and range. The nearest groundwater data listed is in the section due north of Section 8 which is Sec 5, T23S, R31E.

The release is due to a failure of a high pressure line that resulted in a release of produced water. The impacted area is the well pad and small area off the north edge of pad. The major impact seems to be at the point of release which is inside the fenced area of the Salt Water Disposal (SWD). Run-off from the point of release spread to the north side of the pad. Upon discovery the well was shut in and the line has been repaired/replaced.

Work Conducted to Date

As requested, a site delineation was conducted on 22Sept15, using a backhoe. Soil samples were collected to a depth of 10' BGS on the pad (Sample Points 1-2). At 10' BGS bucket refusal occurred due to hard rock. At Sample Point 3 off the north side of the pad, soil samples were taken down to a depth of 7' BGS at which point bucket refusal occurred. Samples were taken at 1' intervals beginning at 1' BGS.

All samples were filed tested for chlorides using Hach Titration Strips. Based on the field test results, three samples from each sample point were selected for lab analysis. See the attached spread sheet for results.

Proposed Remediation Plan

The impacted area at the point of release (inside the fence) will be hand excavated to 2' BGS. The impacted area outside the fence will be and excavated to a depth of 1' BGS. The excavated area will then be backfilled with fresh caliche, brought back to grade and compacted. This is an active and working SWD, a full delineation and remediation will be conducted when the facility is removed from service.

HUNGRY HORSE, LLC

The impacted area off the north side of the pad will be excavated to a depth of 5' BGS and backfilled with fresh soil and seeded.

Sincerely,



Vernon K. Black, Hungry Horse, LLC

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

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 01 2015

Form C-141
Revised August 8, 2011

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

RECEIVED

Release Notification and Corrective Action

NAB1524531624

OPERATOR ☒ Initial Report ☐ Final Report	
Name of Company Devon Energy Production Company 6137	Contact Dan Suniga; Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No. 575-390-5850
Facility Name North Pure Gold 8 Federal 11	Facility Type Salt Water Disposal
Surface Owner Federal	Mineral Owner Federal
API No 30-015-32619	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	8	23S	31E	1400	South	1540	East	Eddy

Latitude: 32.31545

Longitude: -103.795859

NATURE OF RELEASE

Type of Release Produced water release	Volume of Release 20 BBLS	Volume Recovered 18 BBLS
Source of Release hole in high pressure hose on H pump	Date and Hour of Occurrence September 1, 2015 2:40 AM	Date and Hour of Discovery September 1, 2015 2:40 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? BLM; Jim Amos OCD-Mike Bratcher	
By Whom? Assistant Production Foreman; David Simmons	Date and Hour BLM-September 1, 2015 4:40 AM OCD- September 1, 2015 2:10 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		

Describe Cause of Problem and Remedial Action Taken.*

Hole in high pressure line on the H pump allowed 20 BBLS of produced water to be released. The power to the H pump and the charge pump was shut off and then the closed the valves upstream and downstream of the release to prevent further release. Line is being repaired.

Describe Area Affected and Cleanup Action Taken.*

20 BBLS of produced water was released. All of the released fluid remained on location. 18 BBLS of the released fluid was recovered via vacuum truck. Release occurred north of the water tanks. Approximate size of the affected area is 30' x 30'. Most of the released fluid collected in a hole that the produced water created when it released from the high pressure line. Environmental Agency will be contacted for remediation services.

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: Sandy Farley		OIL CONSERVATION DIVISION	
Printed Name: Sandra Farley		Signed By: Mike Bratcher	
Title: Field Admin Support		Approved by Environmental Specialist:	
E-mail Address: sandy.farley@dvn.com		Approval Date: 9/2/15	Expiration Date: N/A
Date: 9.1.15 Phone: 575.746.5587		Conditions of Approval:	
* Attach Additional Sheets If Necessary		Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 10/2/15	
		Attached ☐	

2RP-3233



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

No records found.

PLSS Search:

Section(s): 8

Township: 23S

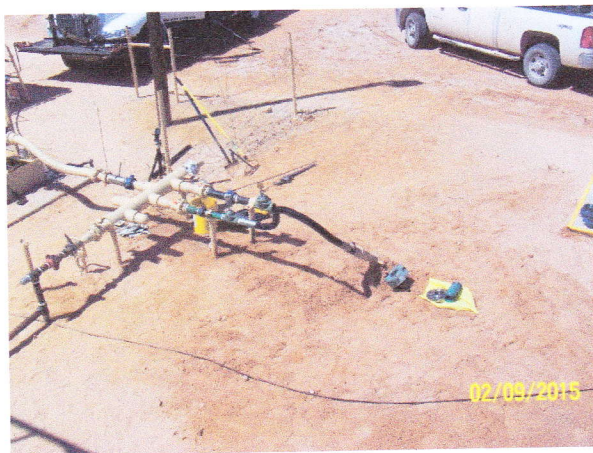
Range: 31E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/2/15 11:47 AM

Page 1 of 1

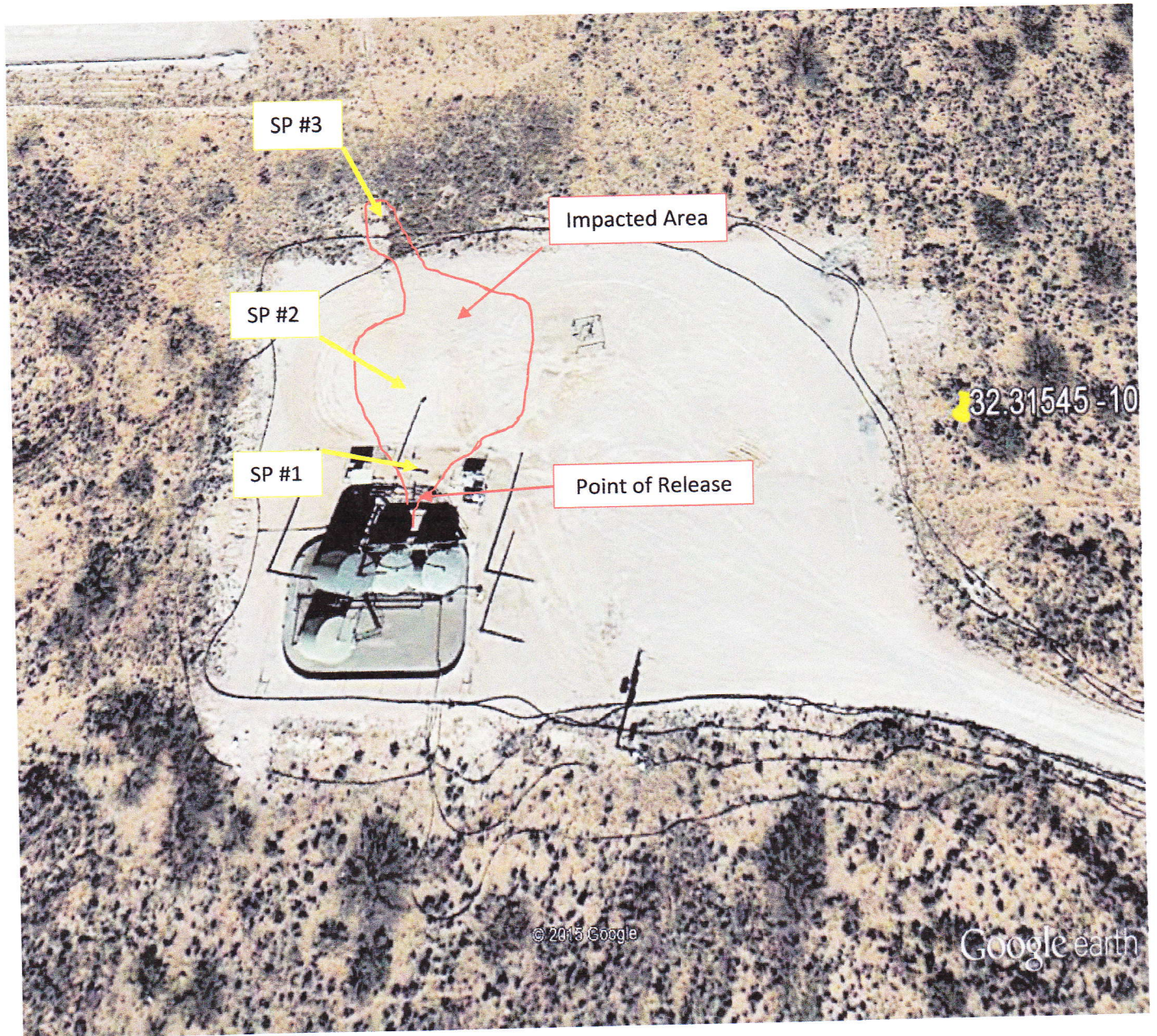
WATER COLUMN/ AVERAGE
DEPTH TO WATER



Devon Energy Production Company-North Pure Gold 8 Fed 11 SWD



Devon Energy Production Company-Pure Gold 8 Fed 11 SWD



Delineation - Lab/Field Test Results

Operator: Devon Energy Production Co

Location: North Pure Gold 8 Fed 11 SWD

Date: 22Sept15

CHLORIDES

[illegible]

NOTE: Field Test Results (Titration Strips) are given in black
Lab Analysis Results are given in **RED**

All result are given as Parts Per Million.

September 28, 2015

VERNON BLACK

Hungry Horse Environmental

P.O. Box 1058

Hobbs, NM 88240

RE: NORTH PURE GOLD #8 FED 11 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/22/15 13:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Hungry Horse Environmental
 VERNON BLACK
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

 Received: 09/22/2015
 Reported: 09/28/2015
 Project Name: NORTH PURE GOLD #8 FED 11 SWD
 Project Number: NOT GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 09/21/2015
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Judy Garcia

Sample ID: SP1-12' IN FRONT OF FENCE 1' BGS (H502496-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP1-12' IN FRONT OF FENCE 6' BGS (H502496-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP1-12' IN FRONT OF FENCE 10' BGS (H502496-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2640	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP2-75' IN FRONT OF FENCE 1' BGS (H502496-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	09/23/2015	ND	432	108	400	0.00	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Hungry Horse Environmental
VERNON BLACK
P.O. Box 1058
Hobbs NM, 88240
Fax To: (505) 391-4585

Received: 09/22/2015
Reported: 09/28/2015
Project Name: NORTH PURE GOLD #8 FED 11 SWD
Project Number: NOT GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/21/2015
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Judy Garcia

Sample ID: SP2-75' IN FRONT OF FENCE 5' BGS (H502496-05)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP2-75' IN FRONT OF FENCE 7' BGS (H502496-06)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP3-OFF NORTH SIDE OF PAD 1' BGS (H502496-07)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5280	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP3-OFF NORTH SIDE OF PAD 3' BGS (H502496-08)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7800	16.0	09/23/2015	ND	432	108	400	0.00	

Sample ID: SP3-OFF NORTH SIDE OF PAD 5' BGS (H502496-09)

Chloride, SM4500CI-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	09/23/2015	ND	432	108	400	0.00	

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



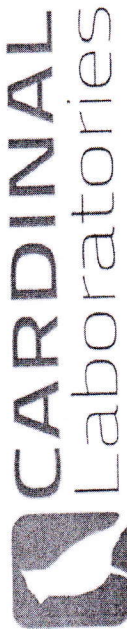
CARDINAL
Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

BILL TO				ANALYSIS REQUEST																
Company Name:				P.O. #:																
Project Manager:				Company:																
Address:				Attn:																
City:				Address:																
Phone #:				City:																
Project #:				State:																
Project Name:				Phone #:																
Project Location:				Fax #:																
Sampler Name:																				
Lab I.D.	Sample I.D.	# CONTAINERS	(G) RAB OR (C) COMP	MATRIX	PRESERV	SAMPLING	DATE	TIME												
1002496	SP1-12' in front of Fence	6	6	WASTEWATER			21 Sept	12:00												
1	1' BG5	6	6	SOIL																
2	6' BG5	6	6	SLUDGE																
3	10' BG5	6	6	OTHER																
4	SP2-75' in front of Fence	6	6	ACID/BASE			21 Sept	12:00												
4	1' BG5	6	6	ICE / COOL																
5	5' BG5	6	6	OTHER																
6	7' BG5	6	6	OTHER																

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Relinquished By:	Date: 9-21-15	Received By:	Date: 21 Sept 15 12:00	Phone Result:	Yes ☐ No ☐	Add'l Phone #:	
Relinquished By:	Date: 9-21-15	Received By:	Date: 21 Sept 15 12:00	Fax Result:	Yes ☐ No ☐	Add'l Fax #:	
Delivered By: (Circle One)	Time: 10:00	Sample Condition	Good ☒ Bad ☐	REMARKS:			
Sampler - UPS - Bus - Other:		Initials					



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO				ANALYSIS REQUEST													
Company Name: Hungry Horse, LLC				P.O. #:													
Project Manager: Vernon K. Black				Company:													
Address: PO Box 1058				Attn:													
City: Hobbs				Address:													
Phone #: 575-631-2253				City:													
Project #: 111				State:													
Project Name: North Pine Gold #8 Fed 11 SWD				Phone #:													
Project Location:				Fax #:													
Sampler Name: Vernon K. Black																	
FOR LAB USE ONLY				MATRIX				PRESERV		SAMPLING							
				# CONTAINERS				(G)RAB OR (C)OMP									
				GROUNDWATER													
				WASTEWATER													
				SOIL													
				OIL													
				SLUDGE													
				OTHER:													
				ACID/BASE													
				ICE / COOL													
				OTHER:													
				DATE				TIME									
				21 Sept 15				12:00									
				21 Sept 15				12:00									
				21 Sept 15				12:00									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use of profits, incurred by client, its subsidiaries, affiliates or successors, arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated causes of obligation.

Relinquished By:

Date: 9-21-15
Time: 1:53 PM

Received By:

Date: 9-21-15
Time: 1:53 PM

Phone Result: ☐ Yes ☐ No
Fax Result: ☐ Yes ☐ No
Add'l Phone #: ☐ Yes ☐ No
Add'l Fax #: ☐ Yes ☐ No

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

Intact ☐ Yes ☐ No

Checked BY:

Initials

9/21/15

10:00

10:00

10:00

10:00

10:00

10:00

10:00

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10:00

10:00

10:00