

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone (303)894-2100 Fax (303)894-2109



DE ET GE SA

DOCUMENT
#2223188

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form). Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b).

RECEIVED
3/9/2012

1 OGCC Operator Number: 100122	4 Contact Name: Lee Fyock	Complete the Attachment Checklist OP OGCC
2 Name of Operator: Gunnison Energy Corporation	Phone: (303) 296-4222	
3 Address: 1801 Broadway, Suite 1200 City: Denver State: CO Zip: 80234	Fax: (303) 296-4555	
5 API Number: 05	OGCC Facility ID Number: 421-193 421193	Survey Plat
6 Well/Facility Name: Hotchkiss Wtr. Storage Facility	7 Well/Facility Number	Directional Survey
8 Location (Qtr/Sec, Twp, Rng, Meridian): NENW Section 18, T12S, R89W, 6th P.M.		Surface Eqmt Diagram
9 County: Gunnison	10 Field Name:	Technical Info Page
11 Federal, Indian or State Lease Number:		Other X

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No
	Distance to nearest well same formation
	Surface owner consultation date:
GPS DATA:	
Date of Measurement PDOP Reading Instrument Operator's Name	
<input type="checkbox"/> CHANGE SPACING UNIT	<input type="checkbox"/> Remove from surface bond
Formation Formation Code Spacing order number Unit Acreage Unit configuration	Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	<input type="checkbox"/> CHANGE WELL NAME
Effective Date	From
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	To:
	Effective Date
<input type="checkbox"/> ABANDONED LOCATION:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date well shut in or temporarily abandoned:
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Ready for Inspection:	MIT required if shut in longer than two years Date of last MIT
<input type="checkbox"/> SPUD DATE:	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries	
Method used	Cementing tool setting/perf depth
Cement volume	Cement top
Cement bottom	Date
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.	
Final reclamation will commence on approximately	
<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Report of Work Done
Approximate Start Date	Date Work Completed: January 12, 2012
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)	
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: Hydraulic Test Lower Pit
	<input type="checkbox"/> E&P Waste Disposal
	<input type="checkbox"/> Beneficial Reuse of E&P Waste
	<input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Lee Fyock Date: 3/8/12 Email: lee.fyock@coxsw.comPrint Name: Lee Fyock Title: Director of Environmental and PermittingCOGCC Approved: [Signature] Title: Env. Sup. Date: 3/12/12

CONDITIONS OF APPROVAL, IF ANY:

Lower P.7

HYDROSTATIC TEST REPORT
LOWER PIT
HOTCHKISS WATER STORAGE FACILITY
GUNNISON COUNTY, COLORADO

Prepared for:

Gunnison Energy Corporation
1801 Broadway, Suite 1200
Denver, Colorado 80202

Prepared by:

Weston Solutions, Inc.
1435 Garrison St, Suite 100
Lakewood, Colorado 80226

March 2012

Background:

Gunnison Energy Corporation (GEC) contracted Weston Solutions, Inc. (Weston) to design a Central Exploration and Production Water Storage Facility on the Hotchkiss Ranch Property in Gunnison County, Colorado. The storage facility was designed with 2 holding pits. The upper pit was designed with a storage capacity of approximately 322, 154 barrels of produced water. The lower pit was designed with a storage capacity of approximately 140,538 barrels of produced water for a combined total of 462,692 barrels. The storage pits were lined with a layer of 16 ounce Geotextile fabric, a “Secondary” 60-mil high density polyethylene (HDPE) layer, a layer of 200mil Geocomposite drainage material and an additional “Primary” 60-mil HDPE layer to contain the produced water. A hydrostatic test was performed on the lower pit liner system and construction will be complete this spring. The pit will be commissioned at that time.

Lower Pit Liner Installation:

The General Contractor, Rundle Construction contracted Simbeck & Associates (Simbeck) to install the liner system in the storage pits. Simbeck provided documentation reflecting the required experience for the company, superintendent and seaming personnel of liner installation required by the specifications.

Liner installation activities for the geotextile fabric and “Secondary” liner in the lower pit began on December 2nd. Simbeck performed air channel tests on all of their fused seams and vacuum tests on all extruded repair seams to verify that all of the seams were continuous and met the required specifications. Weston collected destructive seam tests from the “Secondary” liner per the specifications and sent for testing by an independent laboratory (TRI Environmental, Inc.) to confirm the Simbeck field testing results. “Secondary” liner installation was completed on December 8th.

Geocomposite and “Primary” liner installation began on December 9th. The required destructive seam test results were required before proceeding with installation of the geo-composite and the primary liner. The final panel was placed on the December 14th and the final welding occurred on December 15th. Simbeck performed air channel tests on all fused seams and vacuum tests on all extruded repair seams to verify that all were continuous and met the required specifications. Weston collected destructive seam tests from the “Primary” liner per the specifications and sent for testing by an independent laboratory to confirm the Simbeck field testing results.

Lower Pit Liner QC:

All test data was monitored in the field during installation to ensure the installation was to specifications. Weston provided full-time on-site construction management oversight of all activities. Upon completion of the HDPE liner system in the lower pit and after receipt of all QC data from both the installer and the third party destructive seam tests, the QC data was analyzed. The QC forms and the liner as-built drawings were comprehensive and indicated a good installation. As built layouts of the liner system as well as QC documentation is included as Attachment A. This documentation was thoroughly checked before the hydrostatic test as performed.

Hydrostatic Test:

On January 7th Gunnison Energy Corporation began filling the lower pit with water to perform a hydrostatic test as required by the Colorado Oil and Gas Conservation Commission (COGCC) to assess integrity of the liner system. Water was pumped from West Muddy Creek to the upper pit. A small amount of the water was from coal bed methane wells as approved in the December 5th Sundry Notice. The coal bed methane wells were not producing water so this volume was insignificant. Pumping from West Muddy Creek was halted on January 13th. A pump test on the upper pit leak detection layer was performed on February 1st. After the test was completed GEC began pumping water from the upper pit to the lower pit. This commenced on February 15th and was completed on February 19th. A temporary pumping system has been installed in the leak detection sump of the lower pit, however permanent power has not been installed so temporary power is required to operate the pump. Monitoring the leak detection layer indicated water was present. A pump test on the leak detection layer indicated the leak in the primary liner with 5 feet of water in the lower pit was approximately 7.4 gpm or 250 bbl/day. The hydrostatic test of the lower pit was conducted on February 27th through March 1st. The results of the test indicate the liner system is not leaking. The hydrostatic test report is included as Attachment B.

Analysis of Lower Pit Water:

On January 30th water samples were taken from the lower pit and submitted to Accutest Laboratories for analysis of groundwater constituents on Table 910-1 of the COGCC regulations. Benzene, toluene, ethyl benzene and xylene (BTEX) concentrations in the water were non-detect for benzene and the concentrations of the remaining constituents were below the standards found on Table 910-1. The inorganic constituents consisting of chloride, TDS, and sulfate were analyzed at 17.8 mg/L, 414 mg/L and 21.2 mg/l respectively. The BTEX, chloride, TDS, and sulfate levels indicate the water meets COGCC regulatory standards. The analytical test report is included in Attachment C.

Further Action:

The elevation of the water surface in the lower pit during the hydrostatic test, with the datum adjusted was 7,327.2 feet above MSL. A calculation of the volume of water remaining, based on a stage storage table indicates 81,721 bbls or 3,432,318 gallons of water remain in the pit. This calculation is included as Attachment D. Since this water is high quality and does not pose a risk to humans, animals or the environment, it will remain in the pit until an electronic leak location test can be completed. The objective is to locate the leaks in the primary liner before the pit is evacuated for repairs. The electronic leak location test requires both the pit and the leak detection layer have water in them. The test is performed by installing an electrode in the fluid in the leak detection layer. A “sled” is then pulled across the bottom of the pit and anywhere there is a leak the sled will detect a current between itself and the electrode in the leak detection layer. These locations are mapped before the pit is evacuated and the required repairs are completed.

In the interim, the water level in the pit will be monitored until the electronic leak location survey can be completed. This electronic leak detection should be completed at ice out this spring and will coincide with completion of the pit construction this spring. Monitoring the water elevation in the pit will be

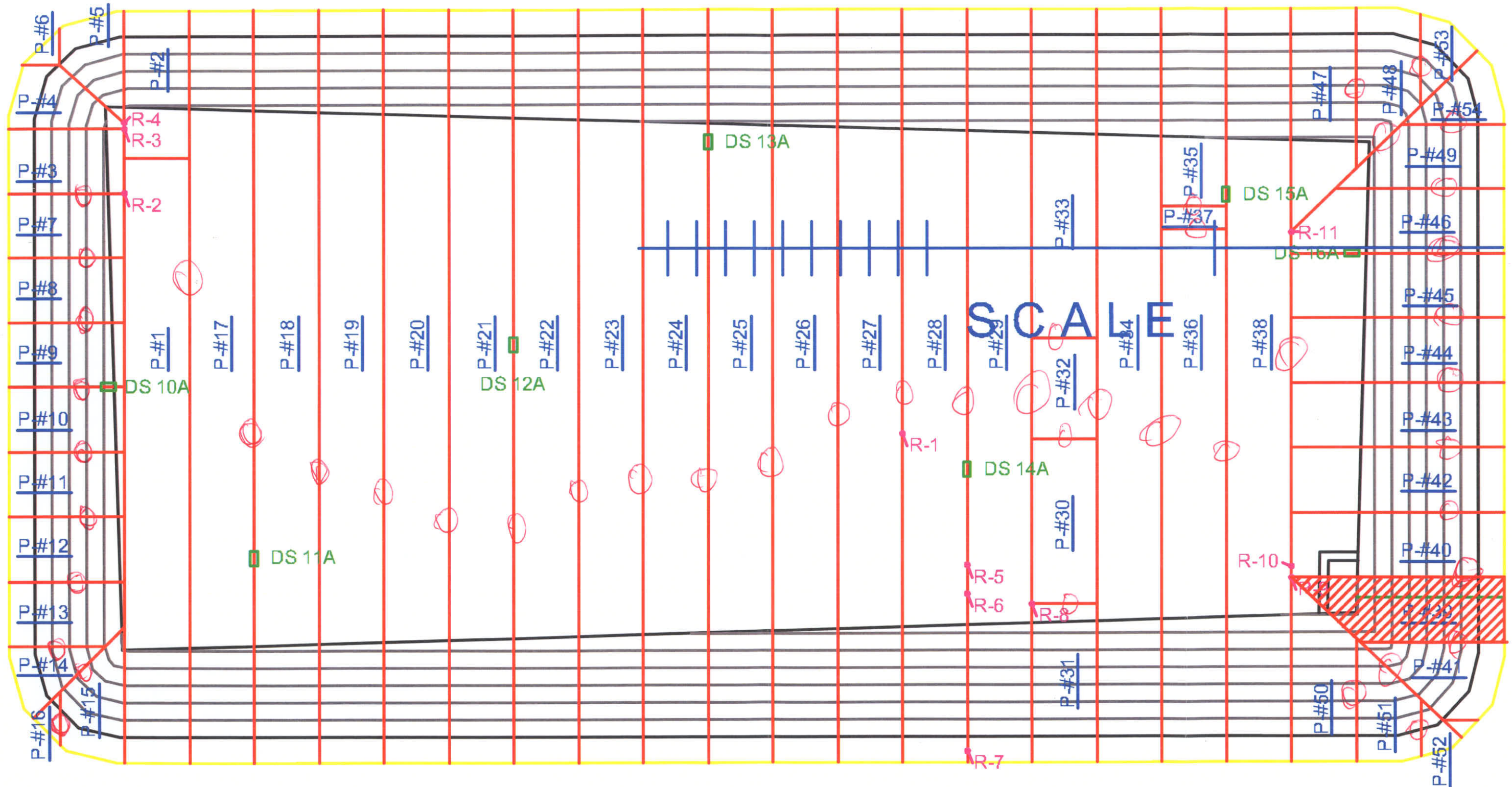
accomplished by surveying the top of the leak detection sump pipe and then measuring the distance of the top of the leak detection sump pipe to the pit water surface. Since the slope of the leak detection sump pipe is known, the water surface elevation can be determined from the distance to the water surface. This will be completed on a monthly basis. Additionally when the water level is measured, an inspection of the French drain manhole will be completed. There has been a minimal but constant discharge from the shallow groundwater system since the completion of the drain. This will be visually inspected. The discharge pipe into the manhole is above the manhole invert so a change in flow can be observed. The flow estimation will not be useful during spring runoff as the flow is expected to increase dramatically. In addition to observation, the discharge water will be sampled and submitted for analysis including all groundwater parameters of Table 910-1 of the COGCC regulations.

Attachment A

Hydrostatic Test Report

OK DAG 1/3/12

PRIMARY 60 MIL HDPE LAYOUT LOWER STORAGE FACILITY



SIMBECK & ASSOCIATES

Destructive Test Seam Log

OK DAG 1/3/12

Job Name:		Hotchkiss Water Lower Pond, Primary Layer					Date:	12/12/11		Page:		
Material Description:		60 Mil HDPE AGRU										
QC/QA Monitor:		DFO						Values				
Date	Sample	Panels	Location	Machine	Temp	Speed	Test	1	2	3	4	5
✓ 12-Dec	10A	9,10	32' N AT	XL3	750	13	Peel:	172/146	158/158			
							Shear:					
✓ 12-Dec	11A	17,18	67' S AT	XL1	750	10	Peel:	148/123	148/140			
							Shear:					
✓ 12-Dec	12A	21,22	111' N AT	XL3	750	13	Peel:	156/131	183/159			
							Shear:					
✓ 12-Dec	13A	24,25	44' N AT	XL3	750	13	Peel:	147/168	160/136			
							Shear:					
✓ 12-Dec	14A	28,29	95' S AT	XL3	750	13	Peel:	136/118	119/140			
							Shear:					
✓ 13-Dec	15A	35,38	60' N AT	XL1	750	11	Peel:	145/151	157/134			
							Shear:					
✓ 13-Dec	16A	45,46	52' W AT	XL3	750	13.5	Peel:	135/142	152/174			
Comments:												



Panel Placement Log

Date: 12/10/11

OK DAB 1/3/12

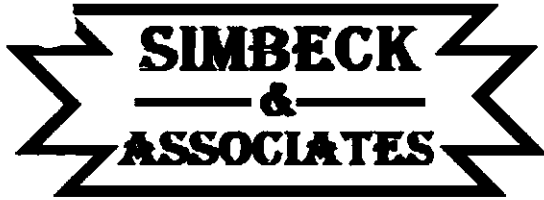
Page: 1

Job Name: Hotchkiss Water Storage, Lower Pond Primary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: 2012

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
10-Dec	10:20	#1 / 370	206	22.5	
10-Dec	10:30	#2 / 474	47	22.5	
10-Dec	10:32	#3 / 474	40	22.5	
10-Dec	10:38	#4 / 474	40	22.5	
10-Dec	10:48	#5 / 474	36	22.5	
10-Dec	10:53	#6 / 370	13	22.5	
10-Dec	10:55	#7 / 474	40	22.5	
10-Dec	10:58	#8 / 474	40	22.5	
10-Dec	11:00	#9 / 474	40	22.5	
10-Dec	11:03	#10 / 474	40	22.5	
10-Dec	11:05	#11 / 474	40	22.5	
10-Dec	11:08	#12 / 474	40	22.5	
10-Dec	11:10	#13 / 474	40	22.5	
10-Dec	11:27	#14 / 506	31	22.5	
10-Dec	11:35	#15 / 506	43	22.5	
10-Dec	11:40	#16 / 506	15	22.5	
10-Dec	12:50	#17 / 506	253	22.5	



Panel Placement Log

OK DAG 1/3/12

Date: 12/11/11

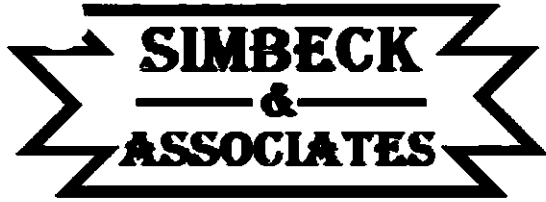
Page: 2

Job Name: Hotchkiss Water Storage, Lower Pond Primary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: 2012

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
11-Dec	11:15	#18 / 366	253	22.5	
11-Dec	11:25	#19 / 366	253	22.5	
11-Dec	11:53	#20 / 473	253	22.5	
11-Dec	12:35	#21 / 473	253	22.5	
11-Dec	1:01	#22 / 472	253	22.5	
11-Dec	1:13	#23 / 472	253	22.5	
11-Dec	1:32	#24 / 367	253	22.5	
11-Dec	1:45	#25 / 367	253	22.5	
11-Dec	2:04	#26 / 484	253	22.5	



Panel Placement Log

OK DAG 1/3/12

Date: 12/12/11

Page: 1

Job Name: Hotchkiss Water Storage, Lower Pond Primary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: _____

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
12-Dec	10:05	#27 / 485	253	22.5	
12-Dec	10:25	#28 / 365	253	22.5	
12-Dec	10:40	#29 / 365	253	22.5	
12-Dec	11:00	#30 / 363	57	22.5	
12-Dec	11:05	#31 / 624	54	22.5	
12-Dec	11:10	#32 / 477	35	22.5	
12-Dec	11:48	#33 / 506	113	22.5	
12-Dec	12:45	#34 / 483	253	22.5	
12-Dec	2:41	#35 / 483	64	22.5	
12-Dec	2:43	#36 / 483	181	22.5	
12-Dec	2:45	#37 / 483	8	22.5	
12-Dec	3:00	#38 / 484	253	22.5	



Panel Placement Log

Date: 12/13/11

OK DAG 1/3/12

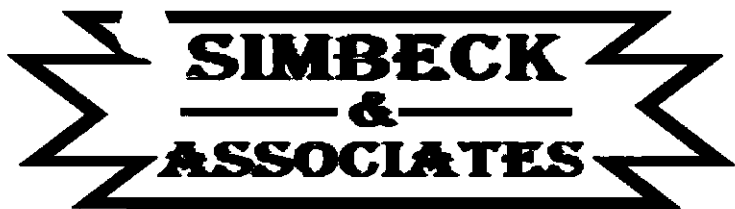
Page: 4

Job Name: Hotchkiss Water Storage, Lower Pond Primary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: 2012

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
13-Dec	11:32	#39 / TEX	73	22.5	
13-Dec	11:40	#40 / TEX	73	22.5	
13-Dec	12:00	#41 / 486	58	22.5	
13-Dec	12:05	#42 / 486	73	22.5	
13-Dec	1:47	#43 / 486	73	22.5	
13-Dec	1:50	#44 / 486	73	22.5	
13-Dec	1:53	#45 / 486	73	22.5	
13-Dec	1:55	#46 / 484	73	22.5	
13-Dec	2:00	#47 / 484	67	22.5	
13-Dec	2:22	#48 / 484	50	22.5	
13-Dec	2:26	49 / 484	59	22.5	
13-Dec	2:37	#50 / 484	60	22.5	
13-Dec	2:44	#51 / 484	34	22.5	
13-Dec	2:50	#52 / 484	13	22.5	
13-Dec	2:55	#53 / 484	23	22.5	
13-Dec	3:07	#54 / 506	36	22.5	



Repair Report

O/C DAG 1/3/12

Date: 12/12/11

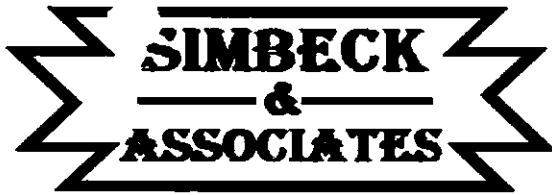
Job Name: Hotchkiss Water Storage Lower Pond, Primary Layer

Page: 1

Material Desc: 60 MIL HDPE AGRU

QC/QA Monitor: DFO

Repair #	Seam or Panel #	Dimension	Welder	Date	Vacuum Testing		
					QC	Date	P / F
✓ #1	28,27 / 10' S AT	2X2	DW	12-Dec	DFO	12-Dec	P
✓ #2	3,1,7 / 40' W AT	1x1	dw	12-Dec	DFO	12-Dec	P
✓ #3	3,4,1 / 40' w at	2X2	DW	12-Dec	DFO	12-Dec	P
✓ #4	5,2 / 40' W AT	1X1	DW	12-Dec	DFO	12-Dec	P
✓ #5	28,29 / 65' S AT	1X1	DW	12-Dec	DFO	12-Dec	P
✓ #6	28,29 / 55' S AT	1X1	DW	12-Dec	DFO	12-Dec	P
✓ #7	28,28 / @ S AT	6X2	DW	12-Dec	DFO	12-Dec	P
✓ #8	31,30,29 / 51' S AT	1X2	DW	12-Dec	DFO	12-Dec	P
✓ #9	39, 40 / 73' E AT	2X2	DW	13-Dec	DFO	13-Dec	P
✓ #10	40 / 73' E AT	2X2	DW	13-Dec	DFO	13-Dec	P
✓ #11	46,47 / 73' N AT	2X2	DW	13-Dec	DFO	13-Dec	P



Trial Welds

Date: 12/14/11

OK DAG 1/3/12

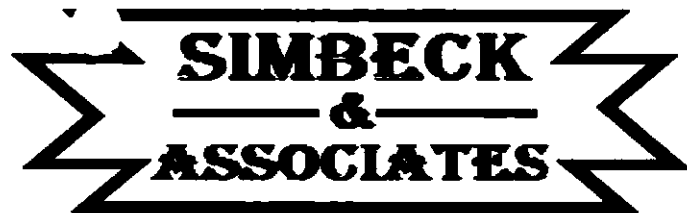
Page: 1

Job Name: Hotchkiss Lower Pond Primary Liner

Material Description: 60 mil HDPE

QC/QA Monitor: DFO

Date	Temp	Welder	Time	Machine	Wedge OR Barrel	Speed OR Preheat	Test	Values				P / F
✓ 10-Dec	33	NJ	10:25	XL1	750	10	Peel:	108/151	144/147	123/146		P
							Sheer:	184	173	192		P
✓ 10-Dec	33	DW	10:25	XL3	750	13	Peel:	131/141	142/138	139/143		P
							Sheer:	167	158	151		P
✓ 11-Dec	30	NJ	11:10	XL1	750	10	Peel:	143/141	152/160	148/151		P
							Sheer:	200	197	198		P
✓ 11-Dec	30	DW	11:10	XL3	750	13	Peel:	152/149	138/142	144/137		P
							Sheer:	204	199	184		P
✓ 12-Dec	35	NJ	10:00	XL1	750	10	Peel:	162/144	157/152	123/149		P
							Sheer:	175	206	188		P
✓ 12-Dec	35	DW	10:00	XL3	750	13	Peel:	126/119	145/140	100/133		P
							Sheer:	182	180	191		P
✓ 13-Dec	34	NJ	11:50	XL1	750	10	Peel:	125/119	145/140	113/140		P
							Sheer:	174	169	174		P
✓ 13-Dec	34	DW	11:50	XL3	750	13	Peel:	131/144	159/136	121/123		P
							Sheer:	183	180	191		P
✓ 14-Dec	35	BC	12:30	X-4	525	450	Peel:	91	118	124		P
							Sheer:	181	191	194		P



Wedge & Air Test Form

OK with exception DAG 1/3/12

Date: 12/10/11

Page: 1

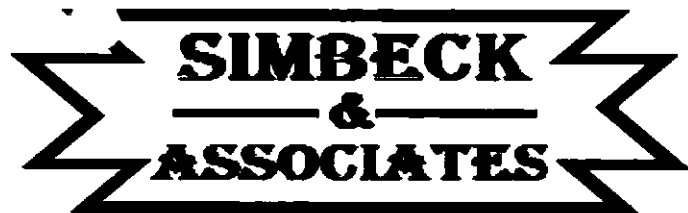
Job Name: Hotchkiss Water Storage Lower Pond Prim. Layer

Material Description: 60 MIL HDPE AGRU

QC/QA Monitor: DFO

Wedge Information							Air Channel Pressure Test Information			
Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
15,16	10-Dec	11:41	XL1	NJ	750	10	10-Dec	38-11:44	38-11:49	P
14,13	10-Dec	11:30	XL1	NJ	750	10	10-Dec	40-11:39	38-11:44	P
13,14,15,16	10-Dec	11:52	XL1	NJ	750	10	10-Dec	40-12:36	38-12:41	P
12,13	10-Dec	11:20	XL3	DW	750	13	10-Dec	35-12:35	35-12:40	P
11,12	10-Dec	11:26	XL3	DW	750	13	10-Dec	35-11:54	35-11:59	P
10,11	10-Dec	11:17	XL1	NJ	750	10	10-Dec	40-11:31	39-11:36	P
9,10	10-Dec	11:11	XL3	DW	750	13	10-Dec	35-11:30	35-11:35	P
8,9	10-Dec	11:11	XL1	NJ	750	10	10-Dec	35-11:20	35-11:25	P
7,8	10-Dec	11:03	XL1	NJ	750	10	10-Dec	40-11:10	39-11:21	P
3,7	10-Dec	10:57	XL1	NJ	750	10	10-Dec	36-11:15	35-11:20	P
3,4	10-Dec	10:38	XL1	NJ	750	10	10-Dec	38-10:48	38-10:53	P
4,6	10-Dec	10:55	XL3	DW	750	13	10-Dec	35-10:59	35-11:04	P
4,6,5	10-Dec	11:06	XL3	DW	750	13	10-Dec			
West Tie-In	10-Dec	1:22	XL3	DW	750	13	10-Dec	40-2:08	39-2:13	P
1,2,17	10-Dec	12:57	XL1	NJ	750	10	12-Dec	35-8:35	35-8:40	P

No results on 4-5-6



Wedge & Air Test Form

OK DAG 4/3/12

Date: 12/11/11

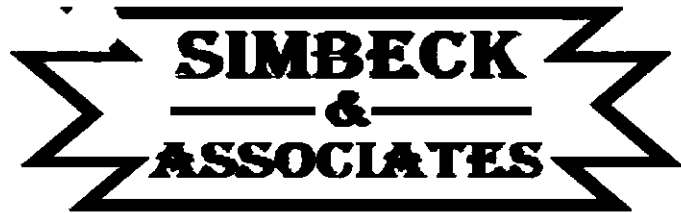
Page: 2

Job Name: Hotchkiss Water Storage Lower Pond Sec. Layer

Material Description: 60 MIL HDPE AGRU

QC/QA Monitor: DFO

Wedge Information							Air Channel Pressure Test Information			
Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
26,25	11-Dec	2:06	XL1	NJ	750	10	11-Dec	40-2:40	38-2:45	P
24,25	11-Dec	1:59	XL3	DW	750	13	11-Dec	45-2:25	44-2:30	P
23,24	11-Dec	1:35	XL3	DW	750	13	11-Dec	45-2:12	43-2:17	P
22,23	11-Dec	1:30	XL1	NJ	750	10	11-Dec	35-2:08	34-2:13	P
21,22	11-Dec	1:00	XL3	DW	750	13	11-Dec	38-1:33	37-1:38	P
20,21	11-Dec	12:58	XL1	NJ	750	10	11-Dec	36-1:30	35-1:35	P
19,20	11-Dec	11:56	XL3	NJ	750	13	11-Dec	35-12:54	33-12:59	P
18,19	11-Dec	11:52	XL1	NJ	750	10	11-Dec	41-12:53	40-12:58	P
17,18	11-Dec	11:20	XL1	NJ	750	10	11-Dec	35-12:52	33-12:58	P



Wedge & Air Test Form

OK DAG 1/3/12

Date: 12/12/11

Page: 3

Job Name: Hotchkiss Water Storage Lower Pond Sec. Layer

Material Description: 60 MIL HDPE AGRU

QC/QA Monitor: DFO

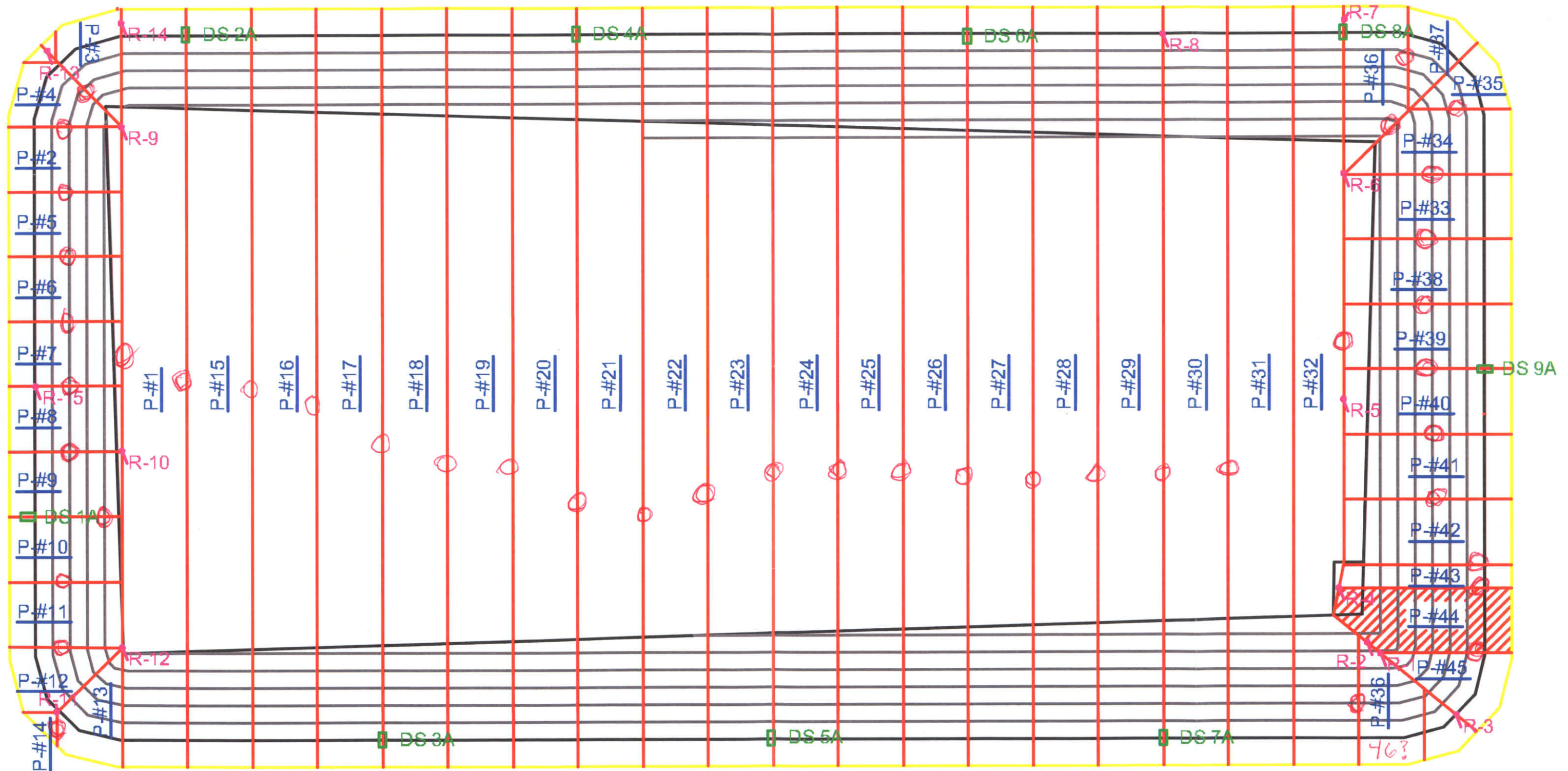
Wedge Information							Air Channel Pressure Test Information			
Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
26,27	12-Dec	10:09	XL3	DW	750	13	12-Dec	39-11:45	39-11:50	P
27,28		10:26	XL1	NJ	750	11	12-Dec	45-11:44	43-11:48	P
28,29	12-Dec	10:40	XL3	DW	750	13	12-Dec	35-11:47	35-11:52	P
30,31,32,33,29	12-Dec	12:45	XL1	NJ	750	11	12-Dec	40-3:20	38-3:25	P
34,35,36,37	12-Dec	2:50	XL1	NJ	750	11	12-Dec	38-3:21	36-3:26	P
34,30,32,33,31	12-Dec	1:25	XL1	NJ	750	11	12-Dec	35-4:00	34-4:05	P
30,31	12-Dec	11:15	XL1	NJ	750	11	12-Dec	35-11:25	35-11:30	P
30,32	12-Dec	11:23	XL1	NJ	750	11	12-Dec	35-11:25	35-11:30	P
32,33	12-Dec	11:51	XL1	NJ	750	11	12-Dec	42-11:58	42-12:03	P
36,37	12-Dec	2:50	XL1	NJ	750	11	12-Dec	42-3:00	41-3:05	P
35,37	12-Dec	3:00	XL1	NJ	750	11	12-Dec	44-3:05	44-3:10	P
38,35,36,37	12-Dec	3:49	XL1	NJ	750	11	12-Dec	40-4:20	40-4:25	P

[illegible]

⊙ = Wedge & Air Test

checked 1/3/12

SECONDARY 60 MIL HDPE LAYOUT LOWER STORAGE FACILITY





Destructive Test Seam Log

OK PAG
12/3/12

Job Name:		Hotchkiss Water Lower Pond, Sec. Layer					Date:	12/8/11		Page:		1
Material Description:		60 Mil HDPE AGRU										
QC/QA Monitor:		DFO					Values					
Date	Sample	Panels	Location	Machine	Temp	Speed	Test	1	2	3	4	5
✓ 8-Dec	1A	9,10	5' W AT	XL3	850	18	Peel:	135/156	130/120			
							Shear:					
✓ 8-Dec	2A	15,1	5' N AT	XL3	850	18	Peel:	143/161	132/129			
							Shear:					
✓ 8-Dec	3A	17,18	5'S AT	XL3	850	18	Peel:	132/135	134/142			
							Shear:					
✓ 8-Dec	4A	20,21	5' N AT	XL1	750	10	Peel:	118/130	132/124			
							Shear:					
✓ 8-Dec	5A	23,24	5' S AT	XL1	750	10	Peel:	142/120	125/132	126/127	127/141	146/137
							Shear:					
✓ 8-Dec	6A	26,27	5' N AT	XL3	750	12	Peel:	100/131	140/158			
							Shear:					
✓ 8-Dec	7A	29,30	5' S AT	XL1	750	10	Peel:	152/160	143/137			
							Shear:					
✓ 8-Dec	8A	32,36	10' N AT	XL1	750	10	Peel:	133/97	133/137			
							Shear:					
✓ 8-Dec	9A	38,39	5' E AT	XL1	750	10	Peel:	128/153	153/135			



Panel Placement Log

Date: 12/2/11

Page: 1

OK DAG

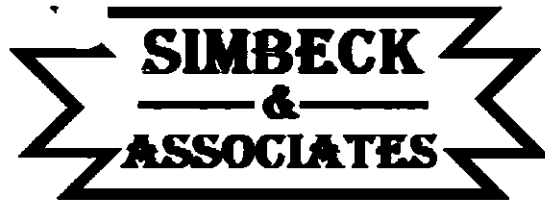
Job Name: Hotchkiss water Storage Lower Pond, Secondary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: 2012

1/3/12

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
2-Dec	10:47	#1 / 622	253	22.5	
2-Dec	10:50	#2 / 622	39	22.5	
2-Dec	10:52	#3 / 622	36	22.5	
2-Dec	11:00	#4 / 622	39	22.5	
2-Dec	11:02	#5 / 622	39	22.5	
2-Dec	11:05	#6 / 622	39	22.5	
2-Dec	11:07	#7 / 622	39	22.5	
2-Dec	11:15	#8 / 622	39	22.5	
2-Dec	11:18	#9 / 371	39	22.5	
2-Dec	11:20	#10 / 371	39	22.5	
2-Dec	11:23	#11 / 371	39	22.5	
2-Dec	11:25	#12 / 371	39	22.5	
2-Dec	11:43	#13 / 371	37	22.5	
2-Dec	11:45	#14 / 371	8	8	
2-Dec	12:30	#15 / 371	253	22.5	
2-Dec	12:55	#16 / 632	253	22.5	
2-Dec	1:37	#17 / 632	253	22.5	
2-Dec	2:15	#18 / 507	253	22.5	
2-Dec	3:00	#19 / 507	253	22.5	
2-Dec	3:30	#20 / 369	253	22.5	



Panel Placement Log

OK 00 1/3/12

Date: 12/5/11

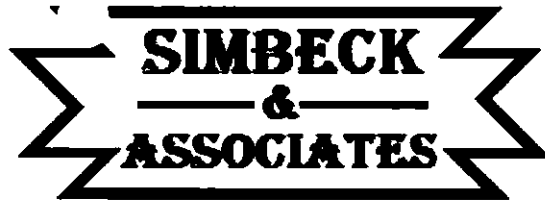
Page: 2

Job Name: Hotchkiss Water Storage Lower Pond Secondary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: 2012

Date	Time	<u>Panel</u> # / <u>Roll</u> #	Panel Length	Panel Width	Panel Location / Comments
5-Dec	11:50	#21 / 369	253	22.5	
5-Dec	12:10	#22 / 631	253	22.5	
5-Dec	1:22	#23 / 631	253	22.5	



Panel Placement Log

OK DAG 1/3/12

Date: 12/6/11

Page: 3

Job Name: Hotchkiss Water Storage Lower Pond Secondary Layer

Material Desc: 60 MIL HDPE AGRU

Job #:

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
6-Dec	12:54	#24 / 482	253	22.5	
6-Dec	1:12	#25 / 482	253	22.5	
6-Dec	1:21	#26 / 480	253	22.5	
6-Dec	1:40	#27 / 480	253	22.5	
6-Dec	1:55	#28 / 633	253	22.5	
6-Dec	2:10	#29 / 633	253	22.5	
6-Dec	2:25	#30 / 368	253	22.5	
6-Dec	2:45	#31 / 368	253	22.5	



Panel Placement Log

OK DAG 1/3/12

Date: 12/7/11

Page: 4

Job Name: Hotchkiss Water Storage Lower Pond Secondary Layer

Material Desc: 60 MIL HDPE AGRU

Job #: 2012

Date	Time	Panel # / Roll #	Panel Length	Panel Width	Panel Location / Comments
7-Dec	9:45	#32 / 476	253	22.5	
7-Dec	10:17	#33 / 476	58	22.5	
7-Dec	10:30	#34 / 476	58	22.5	
7-Dec	10:39	#35 / 476	33	22.5	
7-Dec	10:47	#36 / 476	53	22.5	
7-Dec	10:55	#37 / 476	29	22.5	
7-Dec	11:09	#38 / 477	58	22.5	
7-Dec	11:19	#39 / 477	58	22.5	
7-Dec	11:37	#40 / 370	58	22.5	
7-Dec	11:38	#41 / 370	58	22.5	
7-Dec	11:41	#42 / 370	58	22.5	
7-Dec	11:45	#43 / 370	58	8	
7-Dec	12:00	#44 / Textured	58	22.5	
7-Dec	12:50	#45 / 370	42	22.5	
7-Dec	1:10	#46 / 370	42	22.5	May be miss labeled 36
LOWER POND SECONDARY LAYER COMPLETE					



Repair Report

OK DAG 1/3/12

Date: 12/7/11

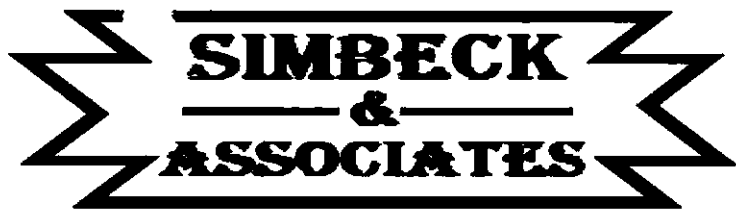
Job Name: Hotchkis Water Storage Lower Pond, Secondary Layer

Page: 1

Material Desc: 60MIL HDPE AGRU

QC/QA Monitor: DFO

					Vacuum Testing		
Repair #	Seam or Panel #	Dimension	Welder	Date	QC	Date	P / F
#1	44,45 40' E AT	1X1	DW	7-Dec	DFO	7-Dec	P
#2	44,36 45' SE AT	3X8	DW	7-Dec	DFO	7-Dec	P
#3	45,36 @ SE AT	5X7	DW	7-Dec	DFO	7-Dec	P
#4	43,44 60' E AT	2X2	DW	7-Dec	DFO	7-Dec	P
#5	40 58' E AT	2X2	DW	7-Dec	DFO	7-Dec	P
#6	33,34 58' E AT	2X2	DW	7-Dec	DFO	7-Dec	P
#7	32,36 @ N AT	3X4	DW	7-Dec	DFO	7-Dec	P



Repair Report

OK DAG 12/3/12

Date: 12/8/11

Job Name: Hotchkis Water Storage Lower Pond, Secondary Layer

Page: 1

Material Desc: 60MIL HDPE AGRU

QC/QA Monitor: DFO

					Vacuum Testing		
Repair #	Seam or Panel #	Dimension	Welder	Date	QC	Date	P / F
#8	29, 30 4' N AT	5X2	DW	8-Dec	DFO	8-Dec	P
#9	1,3 36' N AT	2X2	DW	8-Dec	DFO	8-Dec	P
#10	8,9 39' W AT	2X2	DW	8-Dec	DFO	8-Dec	P
#11	13,14 8' S AT	2X2	DW	8-Dec	DFO	8-Dec	P
#12	11,12 39' E AT	2X2	DW	8-Dec	DFO	8-Dec	P
#13	3,4 @ NW AT	4X4	DW	8-Dec	DFO	8-Dec	P
#14	3,1 @ N AT	3X2	DW	8-Dec	DFO	8-Dec	P
#15	8,7 4' W AT	1X2	DW	8-Dec	DFO	8-Dec	P



Trial Welds

OK 1/3/12 DAG

Date: 12/8/11

Page: 1

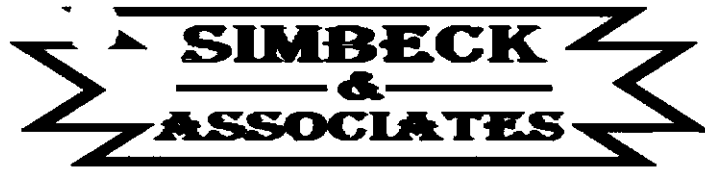
Job Name: Hotchkiss Water Lower Pond Secondary Layer

Material Description: 60 MIL HDPE AGRU

QC/QA Monitor:

DFO

Date	Temp	Welder	Time	Machine	Wedge OR Barrel	Speed OR Preheat	Test	Values				P / F
2-Dec	39	NJ	10:53	XL1	750	12	Peel:	163/143	150/144	122/148		P
							Sheer:	174	204	182		P
2-Dec	39	BC	11:00	XL3	850	18'	Peel:	151/150	146/157	151/143		P
							Sheer:	160	157	146		P
5-Dec	25	BC	11:45	XL3	850	14.5'	Peel:	147/162	151/148	137/141		P
							Sheer:	211	192	207		P
5-Dec	25	NJ	11:55	XL1	750	10'	Peel:	146/153	150/159	147/151		P
							Sheer:	200	195	196		P
6-Dec	23	NJ	12:40	xl1	750	10	Peel:	142/154	145/150	165/148		P
							Sheer:	194	213	193		P
6-Dec	22	DW	1:00	XL3	750	12'	Peel:	151/148	148/149	138/143		P
							Sheer:	170	230	208		P
7-Dec	31	NJ	10:00	XL1	750	10	Peel:	139/132	130/158	128/134		P
							Sheer:	203	188	182		P
7-Dec	31	DW	10:00	XL3	750	13.5	Peel:	131/140	141/139	131/140		P
							Sheer:	203	188	182		P
7-Dec	44	DW	2:00	X-4	525	300	Peel:	111	110	98		P
							Sheer:	172	140	182		P
8-Dec	40	DW	12:15	X-4	525	350	Peel:	102	110	119		P
							Sheer:	179	183	153		P



Wedge & Air Test Form

OK DAG 1/3/12
Page: 1

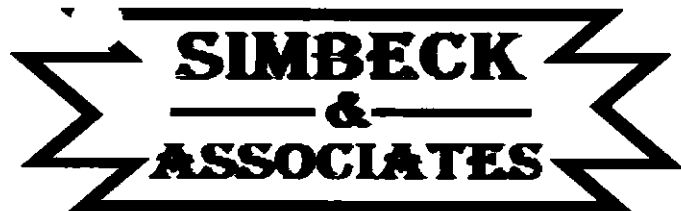
Date: 12/2/11

Job Name: Hotchkiss Water Storage Lower Pond Sec. Layer

Material Description: 60 Mil HDPE AGRU

QC/QA Monitor: DFO

Wedge Information							Air Channel Pressure Test Information			
Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
13 , 14	2-Dec	11:42	XL-1	NJ	750	12	2-Dec	40@1:01	40@1:06	P
11 , 12	2-Dec	11:33	XL-1	NJ	750	12	2-Dec	42@12:25	40@12:30	P
10 , 11	2-Dec	11:27	XL-1	NJ	750	12	2-Dec	38@11:47	37@11:52	P
9 , 10	2-Dec	11:22	XL-3	BC	850	18	2-Dec	35@11:46	35@11:53	P
8 , 9	2-Dec	11:20	XL-1	NJ	750	12	2-Dec	35@11:45	35@11:50	P
7 , 8	2-Dec	11:16	XL-3	BC	850	18	2-Dec	38@11:37	36@11:42	P
6 , 7	2-Dec	11:11	XL-1	NJ	750	12	2-Dec	40@11:30	40@11:35	P
5 , 6	2-Dec	11:10	XL-3	BC	850	18	2-Dec	36@11:25	36@11:30	P
2 , 5	2-Dec	11:06	XL-1	NJ	750	12	2-Dec	35@11:25	35@11:30	P
2 , 4	2-Dec	1:40	XL-3	BC	850	18	2-Dec	35@11:45	35@11:40	P
13 , 12	2-Dec	12:36	XL-1	NJ	750	12	2-Dec	40@1:00	40@1:05	P
4 , 3	2-Dec	11:56	XL-3	BC	850	18	2-Dec	35@11:50	35@11:55	P
1 , 15	2-Dec	12:36	XL-3	BC	850	18	2-Dec	40@2:18	40@2:23	P
15 , 16	2-Dec	12:55	XL-1	NJ	750	12	2-Dec	40@2:15	38@2:20	P
16 , 17	2-Dec	1:38	XL-1	NJ	750	12	2-Dec	41@2:14	40@2:20	P
17 , 18	2-Dec	2:30	XL-3	BC	850	18	2-Dec	37@3:37	35@3:342	P
18 , 19	2-Dec	2:57	XL-1	NJ	750	12	2-Dec	38@3:38	38@3:43	P
19 , 20	2-Dec	3:31	XL-1	NJ	750	12	2-Dec			
TIE-IN	2-Dec	1:40	XL-3	BC	850	18	2-Dec	38@3:23	38@3:28	P
								40@3:10	38@3:15	P
								38@2:55	38@3:00	P
								38@3:05	38@3:10	P



Wedge & Air Test Form

OK DAG 1/3/12

Date: 12/5/11

Page: 2

Job Name: HOTCHKISS WATER STORAGE LOWER POND SEC. LAYER

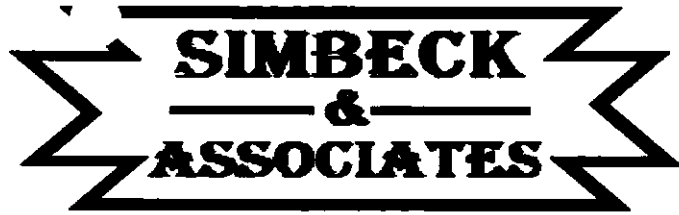
Material Description: 60 MIL HDPE AGRU

QC/QA Monitor: DFO

Wedge Information

Air Channel Pressure Test Information

Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
22,23	5-Dec	1:29	XL1	NJ	750	10	6-Dec	44- 2:35	42 - 2:40	P
22,21	5-Dec	12:15	XL3	BC	850	14	6-Dec	35 - 1:56	35 - 2:01	P
21,20	5-Dec	12:05	XL1	NJ	750	10	6-Dec	40 - 1:55	39 - 2:00	P



Wedge & Air Test Form

OK DAG 1/3/12

Date: 12/6/11

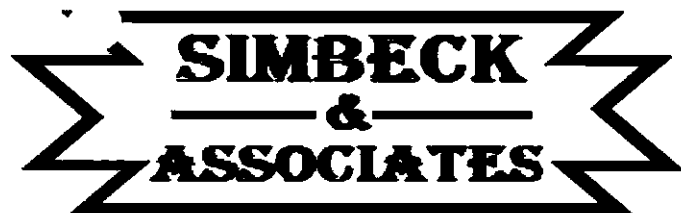
Page: 3

Job Name: HOTCHKISS WATER STORAGE LOWER POND SEC. LAYER

Material Description: 60 MIL HDPE AGRU

QC/QA Monitor: DFD

Wedge Information							Air Channel Pressure Test Information			
Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
23,24	6-Dec	1:25	XL1	NJ	750	10	6-Dec	39 - 2:38	36 - 2:43	P
24,25	6-Dec	1:21	XL3	DW	750	12	6-Dec	40 - 2:39	39 - 2:44	P
25,26	6-Dec	2:00	XL1	NJ	750	10	6-Dec	40 - 2:40	38 - 2:45	P
26,27	6-Dec	1:55	XL3	DW	750	12	6-Dec	42 - 3:23	42 - 3:28	P
27-28	6-Dec	2:31	XL1	NJ	750	10	6-Dec	42 - 3:25	40 - 3:30	P
28,29	6-Dec	2:29	XL3	DW	750	12	6-Dec	38 - 3:26	36 - 3:37	P
29,30	6-Dec	3:03	XL1	NJ	750	10	6-Dec	41 - 3:42	40 - 3:47	P
30,31	6-Dec	3:03	XL3	DW	750	12	6-Dec	39 - 3:43	37 - 3:48	P



Wedge & Air Test Form

OK except omissions DKG 1/3/12

Date: 12/7/11

Page: 4

Job Name: HOTCHKISS WATER STORAGE LOWER POND SEC. LA

Material Description: 60 MIL HDPE AGRU

QC/QA Monitor: DFO

Wedge Information							Air Channel Pressure Test Information			
Panel #	Date	Time	WW	Welder	Temp	Speed	Date	Start - Time	End - Time	Results
36, 37	7-Dec	10:55	XL3	DW	750	13.5	7-Dec	38-11:03	38-11:08	P
34,35	7-Dec	10:39	XL3	DW	750	13.5	7-Dec	40-10:50	40-10:55	P
34,35,36,37	7-Dec	11:10	XL3	DW	750	13.5	7-Dec	40-11:30	38-11:35	P
33,34	7-Dec	10:32	XL3	DW	750	13.5	7-Dec	37-10:45	35-10:50	P
33,38	7-Dec	11:11	XL1	NJ	750	10	7-Dec	42-11:25	41-11:30	P
38,39	7-Dec	11:20	XL1	NJ	750	10	7-Dec	39-11:50	38-11:55	P
39,40	7-Dec	11:38	XL1	NJ	750	10	7-Dec	40-11:52	40-11:58	P
40,41	7-Dec	11:41	XL3	DW	750	13.5	7-Dec	40-11:54	40-11:59	P
41,42	7-Dec	11:48	XL1	NJ	750	10	7-Dec	42-1:47	42-1:52	P
42,43	7-Dec	12:01	XL1	NJ	750	10	7-Dec	45-1:47	43-1:52	P
44,43	7-Dec	11:51	XL3	DW	750	13.5	7-Dec	38-1:52	38-1:57	P
44,45	7-Dec	12:55	XL1	NJ	750	10	7-Dec	35-1:03	35-1:08	P
32,46	7-Dec	1:11	XL1	NJ	750	10	7-Dec	36-1:20	36-1:25	P
EAST TIE-IN	7-Dec	1:38	XL1	NJ	750	10	7-Dec	40 - 2:55	39-3:00	P
								35-3:30	34-3:05	P
								35-3:10	35-3:15	P

Missing 45,46 12-13

Attachment B

Upper Pit Liner QC Documentation

Hydrostatic Pit Testing

Data Collection & Computation Form

Fox Engineering Solutions, Inc.



Pit Owner: Gunnison Energy
Pit Name: Hotchkiss Water Storage Facility - South Pond (Lower)
COGCC Facility No. 421193
Pit Location: N 1/2 Section 18, T12S, R89W, 6th P.M.
Latitude: N 39.0200° Longitude: W107.3771° NAD83
Reported Liner: Two - 60 mil Polyethylene Liners
Approximate Elevation: 7293 ft MSL
Test Conducted By: David Fox, P.E. Fox Engineering Solutions, Inc.

Test Initiation:

Date: February 27, 2012
Time: 10:15 AM
Total Duration: 72.25 hours

Test Termination:

Date: March 1, 2012
Time: 10:30 AM

	<u>Length</u>	<u>Width</u>	<u>Area</u>	<u>Comments</u>
Tributary Pit Liner Surface Area (ft ²):	-	-	120,511 ft. ²	Surveyed by Bookcliff Survey
Initial Pit Water Surface Area:	-	-	101,502 ft. ²	Surveyed by Bookcliff Survey
Final Pit Water Surface Area:	-	-	<u>101,502</u> ft. ²	Surveyed by Bookcliff Survey
Average Pit Surface Area:			101502 ft. ²	
Final Pit Fluid Level:				7293.101 ft.
Initial Pit Fluid Level:				<u>7293.032</u> ft
Difference				0.069 ft or
Est. Fluid Depth:	+8 ft.		(+ indicates fluid level increased)	0.828 inches
Evaporation Pan Installed: No	Location:	Measured Pan Evaporation:		0.00 inches
Ice, frozen conditions		during Test Duration		
		Evaporation w/ Pan Coeff. 0.72		0.00 inches
Precipitation Gauge Installed: Yes	Location: N & E sides of pit	Recorded Precipitation:		0.52 inches
		Equiv. 72-Hour Precip. Inflow:		0.62 inches
Other Inflow/Outflow:	Inflow (gal)	0	Equivalent Inflow:	inches
	Outflow (gal)	0	Equivalent Outflow:	inches
Calculated Fluid Level Change in Inches:			(+ indicates fluid level increased)	
		(Precipitation - 72% Pan Evaporation + Inflows - Outflows)		0.62 inches
Measure Change in Inches:			(+ indicates fluid level increased)	0.83 inches
Difference between Calculated and Measured Pit Fluid Level:				0.21 inches

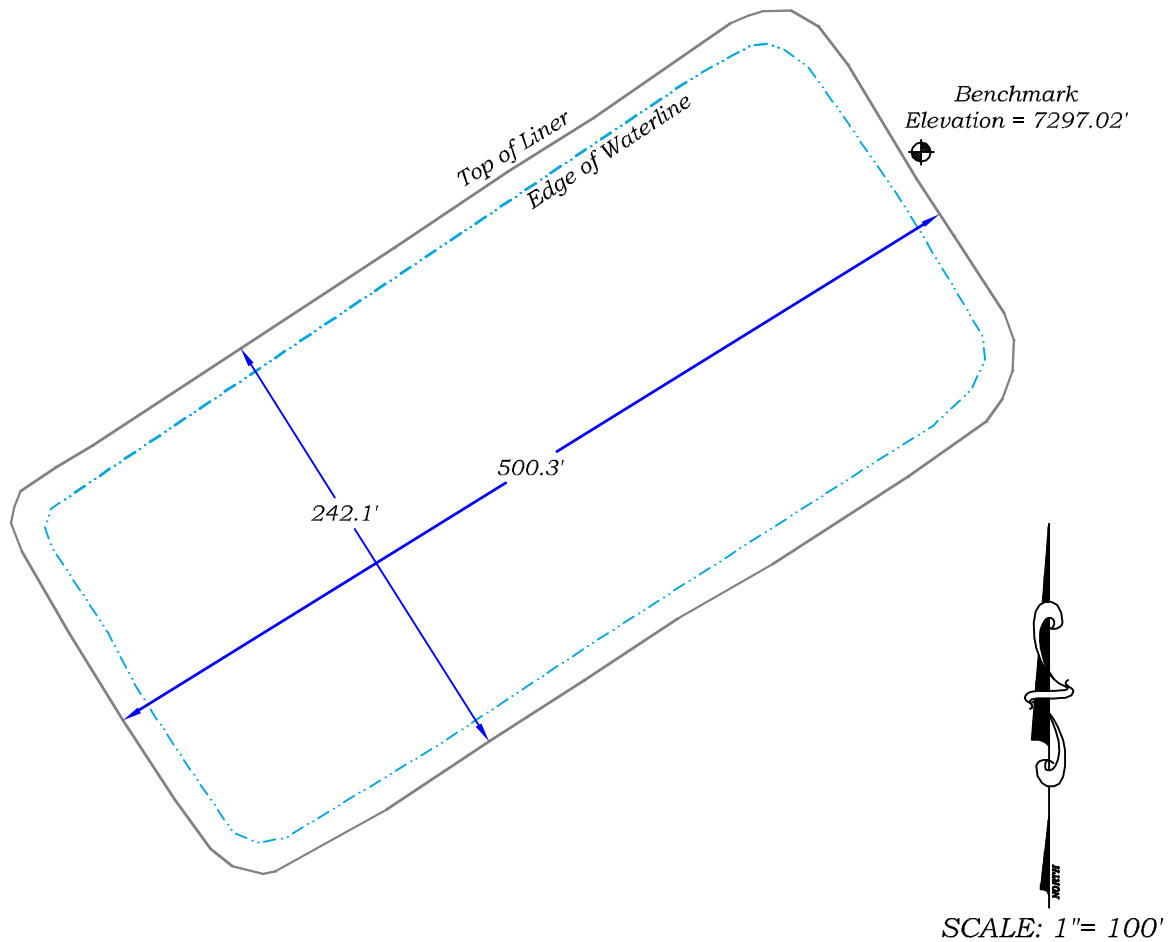
Summary: No observed loss of liner integrity. Fluid level increased. Significant unaccounted blowing snow in pit not recorded in precipitation gauges.
Weather: Variable 10 - 40° temperatures with rainfall/snow/sun.

Liner and Pit Condition: Liner is new with installation completed recently.
2/3 of liner area covered with snow. Visible portion of liner, approximately the top 10 -12 ft.,
had no apparent tears, delamination or seam failures.

Comments: Bookcliff Survey utilized a Trimble Total Station for required area and elevation measurements.
Fresh water fluid level above 8 ft depth. Ice was 6"- 8" thick.
Gunnison Energy and Weaver Boos representatives were onsite at the conclusion of test on March 1, 2012.

HYDROTEST EXHIBIT

GUNNISON ENERGY LOWER PIT



GUNNISON ENERGY LOWER PIT DETAILS

TEST @ 10:15A.M.

TOP WATER ELEV. (FEBRUARY 27, 2012)= 7293.032'
TOP WATER ELEV. (MARCH 1, 2012)= 7293.101'

TOP OF LINER SURFACE AREA= 120,511 sq. ft.
TOP WATER SURFACE AREA= 100,502 sq. ft.
TRIBUTARY AREA= 20,009 sq.ft.

GUNNISON ENERGY LOWER PIT LOCATION

N1/2 SECTION 18,
TOWNSHIP 12 SOUTH,
RANGE 89 WEST OF THE SIXTH P.M.

136 East Third Street
Rifle, Colorado 81650
Ph. (970) 625-1330
Fax (970) 625-2773



Fox Engineering Solutions
670 Canyon Creek Dr.
Grand Junction, CO 81503

GUNNISON ENERGY
LOWER PIT

DATE: 3/1/12
SHEET: 1 OF 1
PROJECT: HYDROTEST
DFT: SRB

Hydrostatic Testing Procedures for COGCC Earthen Pits

Vers. 6.0 12-15-11 ©



The purpose for hydrostatic testing earthen pits is to comply with COGCC approval conditions for verifying the fluid holding integrity of the pit lining system. These procedures are specific to existing or active earthen pits holding oil and gas related fluids including, but not limited to, produced water. During testing, the pit shall have fluid level as high as practical, without encroaching into the 2 ft. freeboard, and the test shall be conducted for a minimum of 72 hours, if practical. Visible portions of the liner, including the anchor trench and seams, shall be inspected for defects. The test shall be scheduled and coordinated with personnel to ensure that oil and gas activities do not interfere with the test. Testing procedures may be subject to changes as dictated by field and climatic factors. All personnel involved with testing, while onsite, shall comply with their respective EH&S requirements.

- If practical, a sign shall be placed in a conspicuous location during the test stating "Hydrostatic testing in Progress, Pit Closed to All Water Hauling Activities". Contact information shall also be placed on the sign.
- A semi-permanent datum elevation point shall be established at the pit location. The surface area of the water surface and the surface area of the liner area, tributary to the pit shall be measured. The date and time of each measurement shall be documented.
- The pit fluid level; fluid surface area; and the lined surface area, tributary to the pit, shall be measured and recorded at the beginning of the test. The pit fluid level shall be measured again at the end of the test. A survey grade total station shall be utilized for accuracy to capture this information. The date and time of measurements shall be documented.
- A 4" diameter official rain gauge with funnel inlet shall be installed at the pit site. Precipitation shall be recorded for the duration of the hydrostatic test.
- During ice-free periods, pan evaporation shall be measured during the duration of the test following the procedures established by the National Weather Service – NOAA in the document entitled "National Weather Service - Observing Handbook No. 2, dated July 1989. A Class A evaporation pan shall be placed at the site, or as near as practical, with evaporation measured per established procedures. During ice-over periods at the pit, evaporation is assumed negligible and evaporation measurements will not be taken.
- For the duration of the test, all inflows and outflows, such as truck and piped transfers, shall cease. If the cessation of inflows and outflows is not practical, all pit inflows and outflows shall be accurately metered and documented during the test. 24-hour surveillance monitoring may be warranted.
- If no precipitation has occurred during the test, compare the change in the pit fluid level with the recorded pan evaporation. During ice-over periods, compare the pit levels taken at the start and end of the tests.
- If precipitation has occurred during the test, precipitation falling onto tributary portions of the liner, outside of the fluid surface area, may be added as an inflow to the pit and converted into inches of depth over the fluid surface area. During ice-over and snow conditions, precipitation inflow from tributary portions of the liner may be estimated from snow depth and corresponding water equivalent comparisons at the start and termination of the test. Other factors may also be utilized.
- The calculated change in pit level during the test is: $\Delta L = P + I - O - E$ (all measurements converted to inches)

Where: ΔL = Change in pit fluid level P = Precipitation Inflow E = Evaporation
 I = Measured Inflows O = Measured Outflows
- The measured change in the pit fluid level shall be compared to the calculated change, utilizing precipitation and evaporation data, in the pit fluid level during the test duration. The test procedures and results will be reviewed and analyzed for discrepancies. If the test results indicate integrity issues with the lining system, the test will be repeated.

Attachment C

Upper Pit Water Analytical Reports



02/07/12

Technical Report for

Gunnison Energy Inc.

HWSF

8769.255.100151.167

Accutest Job Number: D31449

Sampling Date: 01/30/12

Report to:

**Gunnison Energy Inc.
18380 H Road
Delta, CO 81416
dan.mcwilliams@oxbow.com**

ATTN: Dan McWilliams

Total number of pages in report: 19



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Brad Madadian
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW) UT (NELAP CO00049)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

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Sample Summary

Gunnison Energy Inc.

Job No: D31449

HWSF
Project No: 8769.255.100151.167

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D31449-1	01/30/12	13:45 DM	01/31/12	AQ	Surface Water	HWSF-SP

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Gunnison Energy Inc.

Job No D31449

Site: HWSF

Report Date 2/7/2012 12:29:44 PM

On 01/31/2012, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.1 °C. The sample was intact and properly preserved, unless noted below. An AMS Job Number of D31449 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ

Batch ID: V6V606

- The sample was analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D31305-1MS, D31305-1MSD were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ

Batch ID: GP6440

- The sample was prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D31587-1MS, D31587-1MSD were used as the QC samples for the Chloride, Sulfate, Chloride analysis.

Wet Chemistry By Method SM20 2540C

Matrix AQ

Batch ID: GN13519

- The sample was analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D31485-1DUP were used as the QC samples for the Solids, Total Dissolved analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	HWSF-SP	Date Sampled:	01/30/12
Lab Sample ID:	D31449-1	Date Received:	01/31/12
Matrix:	AQ - Surface Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	HWSF		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V11488.D	1	02/02/12	BR	n/a	n/a	V6V606
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	7.7	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	2.4	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	5.6	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	83%		67-131%
2037-26-5	Toluene-D8	93%		65-130%
460-00-4	4-Bromofluorobenzene	119%		65-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HWSF-SP	Date Sampled:	01/30/12
Lab Sample ID:	D31449-1	Date Received:	01/31/12
Matrix:	AQ - Surface Water	Percent Solids:	n/a
Project:	HWSF		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	17.8	0.50	mg/l	1	02/03/12 09:57	GH	EPA 300/SW846 9056
Solids, Total Dissolved	414	10	mg/l	1	02/02/12	CJ	SM20 2540C
Sulfate	21.2	0.50	mg/l	1	02/03/12 09:57	GH	EPA 300/SW846 9056

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D31449

Client: GUNNISON ENERGY CORP.

Immediate Client Services Action Required: No

Date / Time Received: 1/31/2012 9:00:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: HWSF

Airbill #'s: Fedex

Cooler Security
Y or N
Y or N

- | | |
|--|--|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature
Y or N

- | | |
|---|--------------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Cooler temp verification: | Infrared gun |
| 3. Cooler media: | Ice (bag) |

Quality Control Preservation
Y or N
N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume rec'd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

 Accutest Laboratories
 V:(303) 425-6021

 4036 Youngfield Street
 F: (303) 425-6854

 Wheat Ridge, CO
 www.accutest.com

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: D31449
Account: GUNEICOD Gunnison Energy Inc.
Project: HWSF

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V606-MB	6V11473.D	1	02/01/12	BR	n/a	n/a	V6V606

The QC reported here applies to the following samples:

Method: SW846 8260B

D31449-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	4.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	86% 67-131%
2037-26-5	Toluene-D8	95% 65-130%
460-00-4	4-Bromofluorobenzene	118% 65-130%

Blank Spike Summary

Page 1 of 1

Job Number: D31449

Account: GUNEICOD Gunnison Energy Inc.

Project: HWSF

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V606-BS	6V11474.D	1	02/01/12	BR	n/a	n/a	V6V606

The QC reported here applies to the following samples:

Method: SW846 8260B

D31449-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	48.4	97	70-130
100-41-4	Ethylbenzene	50	49.1	98	70-130
108-88-3	Toluene	50	46.4	93	70-130
1330-20-7	Xylene (total)	150	146	97	56-138

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	84%	67-131%
2037-26-5	Toluene-D8	95%	65-130%
460-00-4	4-Bromofluorobenzene	128%	65-130%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D31449

Account: GUNEICOD Gunnison Energy Inc.

Project: HWSF

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D31305-1MS	6V11477.D	200	02/02/12	BR	n/a	n/a	V6V606
D31305-1MSD	6V11478.D	200	02/02/12	BR	n/a	n/a	V6V606
D31305-1	6V11476.D	100	02/02/12	BR	n/a	n/a	V6V606

The QC reported here applies to the following samples:

Method: SW846 8260B

D31449-1

CAS No.	Compound	D31305-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5070	10000	14900	98	14400	93	3	61-133/30
100-41-4	Ethylbenzene	561	10000	10500	99	10400	98	1	70-130/30
108-88-3	Toluene	9710	10000	19000	93	18800	91	1	70-130/30
1330-20-7	Xylene (total)	7260	30000	37400	100	36200	96	3	56-138/30

CAS No.	Surrogate Recoveries	MS	MSD	D31305-1	Limits
17060-07-0	1,2-Dichloroethane-D4	81%	84%	84%	67-131%
2037-26-5	Toluene-D8	95%	95%	94%	65-130%
460-00-4	4-Bromofluorobenzene	128%	127%	121%	65-130%

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D31449
Account: GUNEICOD - Gunnison Energy Inc.
Project: HWSF

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP6440/GN13546	0.20	0.0	mg/l	20	20.2	101.0	90-110%
Chloride	GP6440/GN13546	0.50	0.0	mg/l	20	19.7	98.5	90-110%
Nitrogen, Nitrate	GP6440/GN13546	0.045	0.0	mg/l	4.52	4.11	91.0	90-110%
Nitrogen, Nitrite	GP6440/GN13546	0.061	0.0	mg/l	6.09	6.10	100.2	90-110%
Solids, Total Dissolved	GN13519	10	0.0	mg/l	400	408	102.0	90-110%
Sulfate	GP6440/GN13546	0.50	0.0	mg/l	30	29.5	98.3	90-110%

Associated Samples:
Batch GN13519: D31449-1
Batch GP6440: D31449-1
(*) Outside of QC limits

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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D31449
Account: GUNEICOD - Gunnison Energy Inc.
Project: HWSF

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN13519	D31485-1	mg/l	418	432	3.3	0-25%

Associated Samples:

Batch GN13519: D31449-1

(*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D31449
Account: GUNEICOD - Gunnison Energy Inc.
Project: HWSF

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP6440/GN13546	D31587-1	mg/l	0.24	2.5	2.8	102.4	80-120%
Chloride	GP6440/GN13546	D31587-1	mg/l	19.1	10	28.6	95.0	80-120%
Nitrogen, Nitrate	GP6440/GN13546	D31587-1	mg/l	0.0	2.83	2.5	88.5	80-120%
Nitrogen, Nitrite	GP6440/GN13546	D31587-1	mg/l	0.0	0.305	0.30	98.5	80-120%
Sulfate	GP6440/GN13546	D31587-1	mg/l	0.0	10	10.2	102.0	80-120%

Associated Samples:

Batch GP6440: D31449-1

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D31449
Account: GUNEICOD - Gunnison Energy Inc.
Project: HWSF

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP6440/GN13546	D31587-1	mg/l	0.24	2.5	2.8	0.0	20%
Chloride	GP6440/GN13546	D31587-1	mg/l	19.1	10	28.5	0.4	20%
Nitrogen, Nitrate	GP6440/GN13546	D31587-1	mg/l	0.0	2.83	2.5	0.0	20%
Nitrogen, Nitrite	GP6440/GN13546	D31587-1	mg/l	0.0	0.305	0.30	0.0	20%
Sulfate	GP6440/GN13546	D31587-1	mg/l	0.0	10	10.1	1.0	20%

Associated Samples:
Batch GP6440: D31449-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

6.4

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Attachment D

Upper Pit Water Volume Calculation

HWSF Lower Pit
Calculation of Water Surface Elevation in Lower Pit

Bookcliff Surveyed Elevation
7293.1 feet

Data Correction Factor-from Del-Mont Survey
34.1 feet

Actual Elevation
7327.2 feet

Based on Lower Pit Stage Curve

Gallons	BBLs
3,432,319	81,722

Lower Pit
Project:
Basin Description:

Contour Elevation	Depth (ft)	Contour Area (sq. ft)	Depth (ft)	Incremental Volume Avg. End (cu. ft)	Cumulative Volume Avg. End (cu. ft)	Incremental Volume Conic (cu. ft)	Cumulative Volume Conic (cu. ft)	Cumulative Volume Conic (gal)	Cumulative Volume Conic (bbls)
7,319.00	0	224.13	N/A	N/A	0	N/A	0	0	-
7,319.50	0.5	2,751.98	0.5	744.03	744.03	626.91	626.91	4689.2868	111.65
7,320.00	1	8,090.62	0.5	2710.65	3454.68	2593.53	3220.45	24088.966	573.55
7,320.50	1.5	16,226.61	0.5	6079.31	9533.99	5962.52	9182.97	68688.6156	1,635.44
7,321.00	2	25,677.16	0.5	10475.94	20009.93	10385.98	19568.94	146375.671	3,485.14
7,321.50	2.5	35,437.29	0.5	15278.61	35288.54	15213.25	34782.19	260170.781	6,194.54
7,322.00	3	45,507.01	0.5	20236.07	55524.62	20183.68	54965.87	411144.708	9,789.16
7,322.50	3.5	55,886.31	0.5	25348.33	80872.94	25303.94	80269.81	600418.179	14,295.67
7,323.00	4	66,474.11	0.5	30590.1	111463.05	30551.86	110821.66	828946.017	19,736.81
7,323.50	4.5	75,506.20	0.5	35495.08	146958.12	35471.11	146292.78	1094269.99	26,054.05
7,324.00	5	82,339.39	0.5	39461.4	186419.52	39449.06	185741.84	1389348.96	33,079.74
7,324.50	5.5	86,973.67	0.5	42328.26	228747.78	42322.98	228064.82	1705924.85	40,617.26
7,325.00	6	89,483.99	0.5	44114.42	272862.2	44112.93	272177.75	2035889.57	48,473.56
7,325.50	6.5	91,402.79	0.5	45221.7	318083.89	45220.85	317398.59	2374141.45	56,527.18
7,326.00	7	93,335.46	0.5	46184.56	364268.45	46183.72	363582.31	2719595.68	64,752.28
7,326.50	7.5	95,282.00	0.5	47154.36	411422.82	47153.53	410735.84	3072304.08	73,150.10
7,327.00	8	97,242.43	0.5	48131.11	459553.93	48130.28	458866.11	3432318.5	81,721.87
7,327.50	8.5	99,216.73	0.5	49114.79	508668.72	49113.96	507980.08	3799691	90,468.83
7,328.00	9	101,204.91	0.5	50105.41	558774.12	50104.59	558084.66	4174473.26	99,392.22
7,328.50	9.5	103,206.96	0.5	51102.97	609877.09	51102.15	609186.81	4556717.34	108,493.27
7,329.00	10	105,222.89	0.5	52107.46	661984.56	52106.65	661293.46	4946475.08	117,773.22
7,329.50	10.5	107,252.70	0.5	53118.9	715103.45	53118.09	714411.56	5343798.47	127,233.30