

Broadbent & Associates, Inc.
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Henderson, NV 89015
Voice (702) 563-0600
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Creating Valuable Solutions, Building Trust



July 18, 2011

Project No. 04-01-101-001

Mr. William Knight, P.E.
Supervisor
Special Projects Branch
Bureau of Corrective Actions
Nevada Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, Nevada 89119

RECEIVED
ENVIRONMENTAL PROTECTION
LAS VEGAS OFFICE
2011 JUL 18 P 2:52

Re: Titanium Metals Corporation
Henderson, Nevada Facility
NDEP Facility ID # 000537
Semiannual Groundwater Monitoring Report – 2nd Semester, 2010
Response to NDEP's June 24, 2011 Comments

Dear Mr. Knight:

Please find attached a copy of Titanium's Metals Corporation's (TIMET's) response to NDEP's comments dated June 24, 2011 regarding the Semiannual Groundwater Monitoring Report for the 2nd Semester of 2010. The attached response has been authored by Ms. Victoria Tyson-Bloyd of Tyson Contracting and me. This document has been reviewed and approved by Craig Wilkinson of TIMET.

If you have any questions regarding this submittal, please do not hesitate to contact me at (702) 563-0600.

Sincerely,
BROADBENT & ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read 'Kirk J. Stowers', is written over the typed name.

Kirk J. Stowers, EM-1549 (exp. 10/11/12)
Associate Geologist

JURAT: I, Kirk J. Stowers, hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances.

cc: Craig Wilkinson – TIMET, hard copy and by electronic mail
Victoria Tyson-Bloyd – Tyson Contracting, Inc., hard copy and by electronic mail
Nevada Division of Environmental Protection, c/o McGinley and Associates, Inc.,
815 Maestro Drive, Reno, Nevada 89511, hard copy only
Nevada Division of Environmental Protection, c/o McGinley and Associates, Inc.,
6280 South Valley View Boulevard, Suite 604, Las Vegas, Nevada 89118, hard
copy and by electronic mail
David Gratson – Neptune, Inc., by electronic mail
Mark Paris – BRC, by electronic mail
Ranjit Sahu – BRC, by electronic mail
Ed Modiano – de maximis, by electronic mail
Joe Kelly – Montrose, by electronic mail
Paul Sundberg – representing Montrose, by electronic mail
Lynne Preslo – representing Montrose, by electronic mail
Brian Waggle – representing Montrose, by electronic mail
Curt Richards – Olin, by electronic mail
Lee Erickson – Stauffer, by electronic mail
Nick Pogoncheff – representing Stauffer, by electronic mail
George Crouse – representing Syngenta, by electronic mail
Matt Pique – Tronox, by electronic mail
Susan Crowley – representing Tronox, by electronic mail
Keith Bailey – representing Tronox, by electronic mail
Deni Chambers – representing Tronox, by electronic mail
Allan DeLorme – ENVIRON International Corp, by electronic mail
Mark Travers - ENVIRON International Corp, by electronic mail
Jeff Gibson – AMPAC, by electronic mail

Attachment A

1. Attachment A, response-to-comments (RTCs), NDEP provides the following comments:
 - a. RTC 1, NDEP notes that per the standard operating procedure for low-flow sampling, the sampling rate could be reduced further. Please consider this and discuss.

TIMET Response: After review of the well logs for J2D3-R (the well in question as clarified in our June 7, 2011 response to NDEP's comments), TIMET feels this well, installed in 1983, is no longer screened appropriately for monitoring current groundwater conditions. TIMET proposes to substitute the monitoring of well J2D3-R by monitoring well EWQAL-12; a currently inactive extraction well situated approximately 200 ft north of J2D3-R between TMPZ-109 and TMPZ-110. The well log for EWQAL-12 and a plan view of the well network in this area is attached.

- b. RTC 2, NDEP disagrees with TIMET's RTC. TIMET states that the data from the downgradient wells cannot be discussed or interpreted without the consideration of the BMI Common Areas well network. TIMET proposes to defer discussion or interpretation of this data until the remedial system is installed and operating. The installation and operation of the remedial system has been continuously delayed. TIMET must discuss the data that is collected in future Deliverables. Submission of data without discussion or interpretation is of little to no use to NDEP.

TIMET Response: As discussed during the July 12, 2011 conference call, TIMET understands NDEP's desire to move each BMI company's focus to incorporate downgradient considerations in a more comprehensive manner within their reporting cycles. To that end, TIMET has agreed to a reduction in reporting cycles to once per year (incorporating two semi-annual monitoring events) while including an additional emphasis on downgradient data and data sharing from neighboring facilities. Implementing this program for the 1st semester 2011 monitoring event, the annual report will be submitted in fall of 2011 (September 30, 2011) and will include an expanded discussion of the downgradient wells TIMET currently monitors.

- c. RTC 5, TIMET's response is similar to RTC 2 in that TIMET appears to be asserting that the data cannot be interpreted or discussed without the context of Tronox data. As noted above, submission of data without discussion or interpretation is of little to no use to NDEP. NDEP reviews the Deliverables and provides comments based on what is presented.

Based upon NDEP's review of Figure D-12, the NDEP's original statement stands.

TIMET Response: In accordance with the new reporting schedule and requirements, see Response to Comment 1.b., no revision to the 2nd Semester 2010 report will be made at this time. TIMET has agreed to display the Tronox/Trust data within the upcoming report noting, however, that the age of the Tronox/Trust data is several years old as compared to current TIMET data. TIMET has also agreed to work with a Trust representative to share current monitoring data. Regarding NDEP's original comment on this item, however, TIMET understands that monitoring for uranium in groundwater is not routinely conducted by the Trust.

- d. RTC 7, please clarify if 23 µg/L is the historic high or not. It appears that the data support this statement, however, TIMET disagrees that this is the historic high. Please clarify.

TIMET Response: For clarity, TIMET agrees that 23 ug/L is the historic high for this well. TIMET was only noting that 23 ug/L was not significantly higher than previous reported values of 19, 22, and 19 ug/L.

- e. RTC 9, similar to RTC 2 and 5, TIMET disagrees with NDEP's interpretation of the data, however, TIMET has provided no information to support their position. Submission of data without discussion or interpretation is of little to no use to NDEP.

TIMET Response: See Response to Comment for 1.b

2. Figure X-X, Vanadium, based upon this Figure, it appears that the elevated vanadium concentrations originate at location CLD4-R, continue to location M-129 and on to location PC-067. This is an issue that is concerning to the NDEP. NDEP understands that TIMET's position would be the same as RTC 2, 5, and 9. NDEP reiterates that submission of data without discussion or interpretation is of little to no use to NDEP.

TIMET Response: TIMET has agreed to display available Tronox/Trust data for vanadium in future submittals. TIMET has also agreed to work with a Trust representative to share current monitoring data. Regarding NDEP's original comment on this item, however, TIMET understands that monitoring for vanadium in groundwater is not routinely conducted by the Trust.

FIELD BOREHOLE LOG

EXTRACTION WELL: **EWQal-12**

TOTAL DEPTH: **65 feet**

PROJECT INFORMATION

DRILLING INFORMATION

PROJECT: **TIMET**
 SITE LOCATION: **Henderson, Nevada**
 JOB NO.: **04-01-101**
 LOGGED BY: **Jeremy Holst**
 PROJECT MANAGER: **Kirk Stowers**
 DATE DRILLED: **1/25/10**

DRILLING CO.: **WDC Exploration**
 DRILLER: **Coben Rockhill**
 DRILLING METHOD: **Sonic**
 START TIME: **1035**
 STOP TIME: **1355**
 SURFACE ELEVATION: **Unknown**

INTERIM BOREHOLE LOG

DEPTH	SOIL SYMB.	USCS	SOIL DESCRIPTION	FINE %	COARSE %	MOIST.	PLAST.	COND. us/cm	WELL CONSTRUCTION DETAILS		
									ANNULUS	CASING	GAUGE LINE
0		SM	5YR 2.5/1 Black sand (fine to coarse) with little silt and little fine gravel. Not naturally occurring.	70%	30%	Dry	None		8/16 Silica Sand		
-5			5YR 5/3 Reddish Brown sand (fine to coarse) with little silt, little fine gravel, trace coarse gravel, and trace clay. Gravel is subangular to subrounded and up to 2 inches in diameter.	60%	40%	Dry	None				
-10		SM	Color change to 5YR 7/4 Pink.	60%	40%	Dry	None	196			
-15			Color change to 5YR 5/2 Reddish Gray. Color change may be due to mixing with sluff from above.	60%	40%	Dry	None		Bentonite Grout		
-20			Color change to 5YR 6/4 Light Reddish Brown.	60%	40%	Dry	None				
-20		ML	5YR 6/4 Reddish Brown sand (fine to coarse) with some silt, little fine gravel, and trace coarse gravel. Gravel is subangular to subrounded and up to 1 inch in diameter.	70%	30%	Dry	None	179			
-25			5YR 6/4 Light Reddish Brown sand (fine								

NOTES: QAL=Quaternary Alluvium; xMCF=Transitional Muddy Creek Formation. Centralizers installed at 5, 30, and 52 feet below land surface. EWQal-12 casing extends feet above land surface. Gauge line extends feet above land surface.

FIELD BOREHOLE LOG

EXTRACTION WELL: **EWQal-12**

TOTAL DEPTH: **65 feet**

PROJECT INFORMATION

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INTERIM BOREHOLE LOG

DEPTH	SOIL SYMB.	USCS	SOIL DESCRIPTION	FINE %	COARSE %	MOIST.	PLAST.	COND. us/cm	WELL CONSTRUCTION DETAILS		
									ANNULUS	CASING	GAUGE LINE
-25		SM	to coarse with greater percentage fine) with some silt, trace clay, trace fine gravel, and trace coarse gravel. Gravel is subangular to subrounded and up to 1 inch in diameter.	75%	25%	Dry	None				
-30		SM	5YR 7/4 Pink sand (fine to coarse) with little silt, little fine gravel, trace coarse gravel, and trace clay. Gravel is subangular to subrounded and up to 1 inch in diameter.	60%	40%	Dry	None	237	1/4" Bentonite Pellets		
-35			5YR 7/3 Pink caliche (lightly cemented).			Dry	None				
-40		SM	5YR 5/4 Reddish Brown sand (fine to coarse) with little silt, little fine gravel, trace coarse gravel, and trace clay. Gravel is subangular to subrounded and up to 2 inches in diameter.	60%	40%	Dry	None				
-40		SM	5YR 5/4 Reddish Brown sand (fine to coarse) with little silt, little fine gravel, trace coarse gravel, and trace cobbles. Cobbles are subangular and up to 4 inches in diameter.	55%	45%	Slight	None	811	8/16 Silica Sand		
-45		ML	5YR 7/4 Pink sand (fine to coarse with greater percentage fine) with little silt and trace fine gravel. Coarse sand and fine gravel appear to be volcanics.	90%	10%	Slight	None				
-45		SM	5YR 5/4 Reddish Brown sand (fine to coarse) with little silt, little fine gravel, and trace coarse gravel. Gravel is subangular to subrounded and up to 1 inch in diameter.	50%	50%	Slight	None				
-50			QAL-xMCF CONTACT (46')								
-50			5YR 6/6 Reddish Yellow sand (dominantly fine) with little silt, trace fine gravel, and trace coarse gravel. Gravel appears to be sandstone clasts.	90%	10%	Slight	None	1762			

NOTES: QAL=Quaternary Alluvium; xMCF=Transitional Muddy Creek Formation. Centralizers installed at 5, 30, and 52 feet below land surface. EWQal-12 casing extends feet above land surface. Gauge line extends feet above land surface.

FIELD BOREHOLE LOG

EXTRACTION WELL: **EWQal-12**

TOTAL DEPTH: **65 feet**

PROJECT INFORMATION

DRILLING INFORMATION

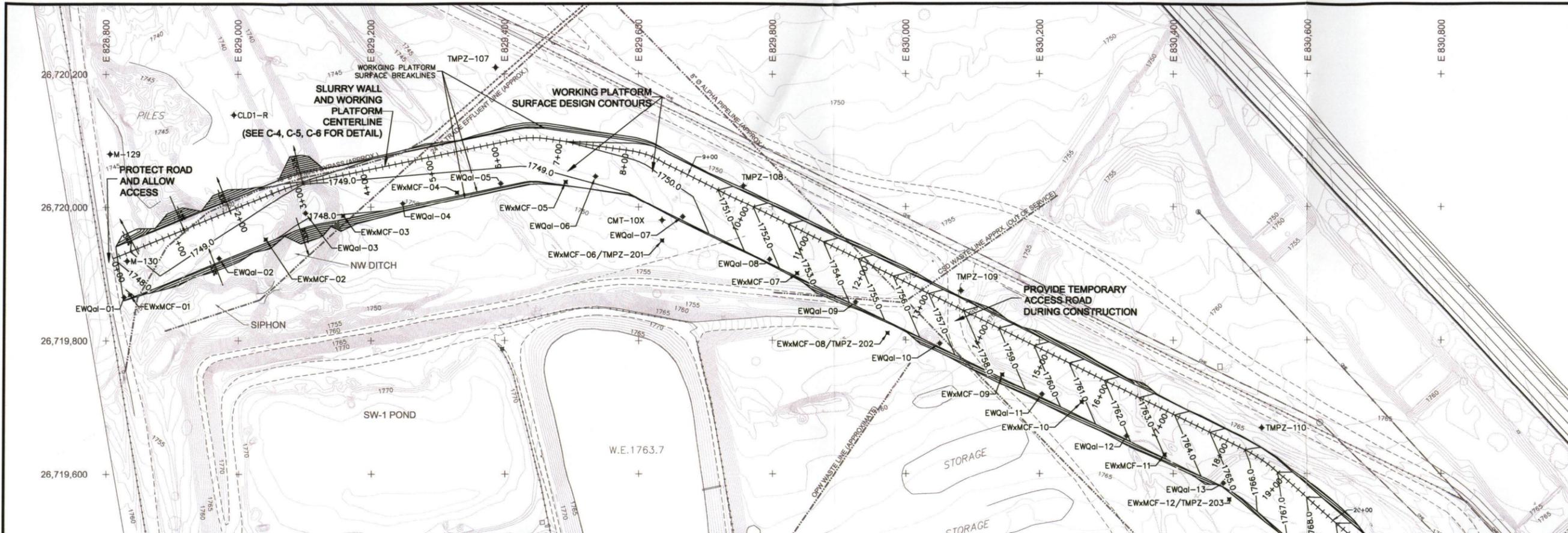
PROJECT: **TIMET**
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INTERIM BOREHOLE LOG

DEPTH	SOIL SYMB.	USCS	SOIL DESCRIPTION	FINE %	COARSE %	MOIST.	PLAST.	COND. us/cm	WELL CONSTRUCTION DETAILS			
									ANNULUS	CASING	GAUGE LINE	
-50		ML										
-55			5YR 6/4 Light Reddish Brown sand (fine to coarse with greater percentage fine) with little silt, little fine gravel, and trace coarse gravel. Gravel appears to be a mixture of volcanics and sandstone clasts.									
-60		SM	NOTE: Drilled 55' to 65' bls twice. No core retrieved on first attempt. On second attempt, 7' of core were retrieved. Lithology documented not likely representative of 55' to 65' bls. Called QAL-xMCF contact at 46' bls as observed 9' of xMCF before recovery problem occurred.	75%	25%	Moist	None	1672		1/4" Bentonite Pellets		
-65												

NOTES: QAL=Quaternary Alluvium; xMCF=Transitional Muddy Creek Formation. Centralizers installed at 5, 30, and 52 feet below land surface. EWQal-12 casing extends feet above land surface. Gauge line extends feet above land surface.



LEGEND:

- WELL (MONITORING, PIEZOMETER, NESTED)
- NEVADA STATE PLANE NAD 1983 GRID MARK
- FENCE
- TREES AND SHRUBS
- MAJOR TOPOGRAPHIC CONTOUR
- MINOR TOPOGRAPHIC CONTOUR
- UTILITY POLE
- UNPAVED ROAD
- UNDERGROUND PIPELINE (APPROXIMATE)
- SIGN POST
- UTILITY POLE
- WORKING PLATFORM BREAKLINES AND DAYLIGHT
- WORKING PLATFORM AND SLURRY WALL CENTERLINE WITH STATIONS
- OVERHEAD ELECTRICAL LINE
- EXTRACTION WELL - Qal
- EXTRACTION WELL - xMCF

NOTES:

1. THE CONTRACTOR SHALL LOCATE AND MARK UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL STAY AWAY AT LEAST 10 FEET FROM THE EXISTING OVERHEAD POWER LINES.
3. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES FROM DAMAGE DURING CONSTRUCTION.
4. COORDINATE GRID MARKS ARE FOR NEVADA STATE PLANE NAD 1983 DATUM.

ALIGNMENT STATION CONTROL POINTS				
Station	Easting	Northing	Working Platform Elevation	Slurry Wall Key Elevation
0+00.00	828,811.16	26,719,923.40	1,748.00	1,747.00
0+50.00	828,857.52	26,719,942.14	1,749.81	1,724.56
1+00.00	828,903.87	26,719,960.88	1,749.83	1,708.53
1+50.00	828,950.23	26,719,979.63	1,749.64	1,707.18
2+00.00	828,996.58	26,719,998.37	1,749.45	1,699.15
2+50.00	829,042.93	26,720,017.11	1,749.26	1,696.78
3+00.00	829,089.28	26,720,035.85	1,749.07	1,699.59
3+50.00	829,135.63	26,720,054.59	1,749.13	1,706.88
4+00.00	829,181.98	26,720,073.33	1,749.25	1,705.98
4+50.00	829,228.33	26,720,092.07	1,749.37	1,705.10
5+00.00	829,274.68	26,720,110.81	1,749.49	1,704.62
5+50.00	829,321.03	26,720,129.55	1,749.62	1,704.60
6+00.00	829,367.38	26,720,148.29	1,749.74	1,705.18
6+50.00	829,413.73	26,720,167.03	1,749.86	1,705.77
7+00.00	829,460.08	26,720,185.77	1,749.98	1,706.61
7+50.00	829,506.43	26,720,204.51	1,750.10	1,708.61
8+00.00	829,552.78	26,720,223.25	1,750.22	1,706.95
8+50.00	829,599.13	26,720,242.00	1,750.34	1,705.81
9+00.00	829,645.48	26,720,260.74	1,750.46	1,706.28
9+50.00	829,691.83	26,720,279.48	1,750.58	1,705.52
10+00.00	829,738.18	26,720,300.86	1,751.85	1,704.35
10+50.00	829,784.53	26,719,981.68	1,752.69	1,703.17
11+00.00	829,830.88	26,719,959.50	1,753.53	1,704.58
11+50.00	829,877.23	26,719,937.32	1,754.40	1,706.68
12+00.00	829,923.58	26,719,915.14	1,755.26	1,706.82
12+50.00	829,969.93	26,719,892.96	1,756.11	1,706.96
13+00.00	830,016.28	26,719,870.78	1,756.96	1,707.09
13+50.00	830,062.63	26,719,848.60	1,757.81	1,707.11
14+00.00	830,108.98	26,719,826.42	1,758.67	1,706.23
14+50.00	830,155.33	26,719,804.24	1,759.52	1,705.37
15+00.00	830,201.68	26,719,782.06	1,760.37	1,705.52
15+50.00	830,248.03	26,719,759.88	1,761.22	1,705.66
16+00.00	830,294.38	26,719,737.70	1,762.08	1,707.52
16+50.00	830,340.73	26,719,715.52	1,762.93	1,710.76
17+00.00	830,387.08	26,719,693.34	1,763.78	1,712.56
17+50.00	830,433.43	26,719,671.16	1,764.64	1,711.91
18+00.00	830,479.78	26,719,648.98	1,765.49	1,709.48
18+50.00	830,526.13	26,719,626.80	1,766.34	1,707.05
19+00.00	830,572.48	26,719,604.62	1,767.19	1,707.21
19+50.00	830,618.83	26,719,582.44	1,768.05	1,707.40
20+00.00	830,665.18	26,719,560.26	1,768.90	1,708.03
20+50.00	830,711.53	26,719,538.08	1,769.75	1,707.23
21+00.00	830,757.88	26,719,515.90	1,770.60	1,704.30

Base Surface	Comparison Surface	Cut	Fill
Timet Surface Design (includes Francy's Mountain Excavation)	Working Platform (15' left + 65' right)	5,101 Bank Cu. Yd.	5,106 Bank Cu. Yd.

ADDENDUM 1

REVISIONS

REV	DATE	DRAWN	CHECKED	REMARKS
1	06/23/09	VM	VM	JUNE 9, 2009 COMMENTS TO 50% DESIGN INCORPORATED
2	07/07/09	VM	VM	JUNE 24, 2009 TIMET COMMENTS INCORPORATED
3	07/14/09	VM	VM	DRAFT RD COMMENTS (SW AND SDH) INCORPORATED
4	10/11/09	VM	VM	DRAFT RD COMMENTS (TIMET AND INEP) INCORPORATED
5	03/23/10	VM	JS	EXPANDED WP TO 15+65. RELOCATED EXT. WELLS.

RE-CHECKED BY: JS
APPROVED BY: JS
DATE: 09/23/10

DESIGNED BY: VM
DRAWN BY: VM
CHECKED BY: SW, JS, VT

**REMEDIAL DESIGN
TITANIUM METALS, HENDERSON, NV
SLURRY WALL WORKING PLATFORM,
SLURRY WALL, AND CAP PLAN**

PROJECT NUMBER:
1464901

DRAWING NO.:
C-3