



FAX BEING SENT BY:

Aqua Science Engineers, Inc.  
208 W. El Pintado Road  
Danville, CA 94526  
Phone (925) 820-9391  
Fax (925) 837-4853

DATE: 11-25-98  
TO: Mr. Scott Seery  
FROM: Dave Allen  
NUMBER OF PAGES TO FOLLOW: 15

12/1/98  
I spoke today with  
Dave Allen (ASE)  
regarding reuse of the  
fuel tank excavation  
stockpiles. I agreed  
that they may be  
reintroduced to the  
fuel UST pit.  
SOS

\*\*\*\*\*Please Phone If This Fax Is Received Incomplete\*\*\*\*\*

MESSAGE:

This requires a response. Please  
call me when you've reviewed  
it.

Thanks,  
Dave



FAX BEING SENT BY:

Aqua Science Engineers, Inc.  
208 W. El Pintado Road  
Danville, CA 94526  
Phone (925) 820-9391  
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DATE: 11-25-98

TO: Mr. Scott Seery

FROM: Dave Allen

NUMBER OF PAGES TO FOLLOW: 9

\*\*\*\*\*Please Phone If This Fax Is Received Incomplete\*\*\*\*\*

MESSAGE:

This requires a response, please  
call me when you've reviewed  
it.

Thanks,  
Dave



November 24, 1998

Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Second Floor  
Alameda, California 94502

ATTENTION: Mr. Scott Seery

SUBJECT: **STOCKPILED SOIL SAMPLING RESULTS**  
Olympic Service Station  
1436 Grant Avenue  
San Lorenzo, California

Dear Mr. Seery:

On November 11, 1998 Aqua Science Engineers, Inc. (ASE), collected soil samples from the stockpiled soil formerly surrounding the gasoline and diesel-fuel underground storage tanks (USTs) at the subject site, see Figures 1 and 2.

### SCOPE OF WORK

Using a hand auger to gain access to the inner portions of the stockpiled soil, ASE collected eight soil samples from each stockpile (sample names STKP-A (1-4) and (5-8) and STKP-B (1-4) and (5-8)) which were later composited by the laboratory into four (4) four-point composite soil samples. The soil samples were extracted from the hand auger sampling device and stored in brass sample containers, covered on both ends with Teflon tap and plastic end caps. Each sample was discretely labeled and stored within an ice chest containing wet ice prior to delivery to the laboratory under chain of custody procedures. Each of the four (4) four-point composite soil samples was analyzed by Chromalab, Inc. of Pleasanton, California (ELAP # 1094) for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 8015M, total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 8015M, benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl-tertiary butyl ether (MTBE) by EPA Method 8015M and total lead by EPA Method 7420. The analytical results are tabulated in Table One and Table Two, attached. The certified analytical report is attached in Appendix A.

At this time, only a faxed copy of the analytical report from Chromalab is available. Upon completion of the sampling activities, the stockpiles were covered completely with visqueen.

### ANALYTICAL RESULTS

The stockpiled soil contains elevated concentrations of TPH-D and total lead. In regard to the TPH-D, the highest concentration identified was 280 parts per million (ppm). ASE believes that this concentration of TPH-D does not pose a significant threat to the site or environment. In regards to the total lead, two of the composite soil samples resulted in lead concentration of less than 5 ppm, the reporting limit. One contained 33 ppm and the other contained 110 ppm. The highest concentration, 110 ppm total lead, is below the US EPA Region IX Preliminary Remediation Goal (PRG) for residential soil.

### RECOMMENDATIONS

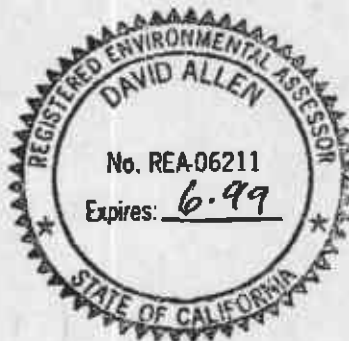
Based on these analytical results, it is the opinion of ASE that both of these stockpiles appear suitable for re-use as backfill material at the site. The void of the former USTs will be replaced with import material.

Backfilling activities are scheduled immediately upon your review and concurrence with the afore-mentioned recommendations. We look forward to hearing from you in the very near future. If you have any questions or comments, please feel free to give us a call at (925) 820-9391.

Respectfully submitted,  
AQUA SCIENCE ENGINEERS, INC.



David Allen, R.E.A.  
Senior Project Manager

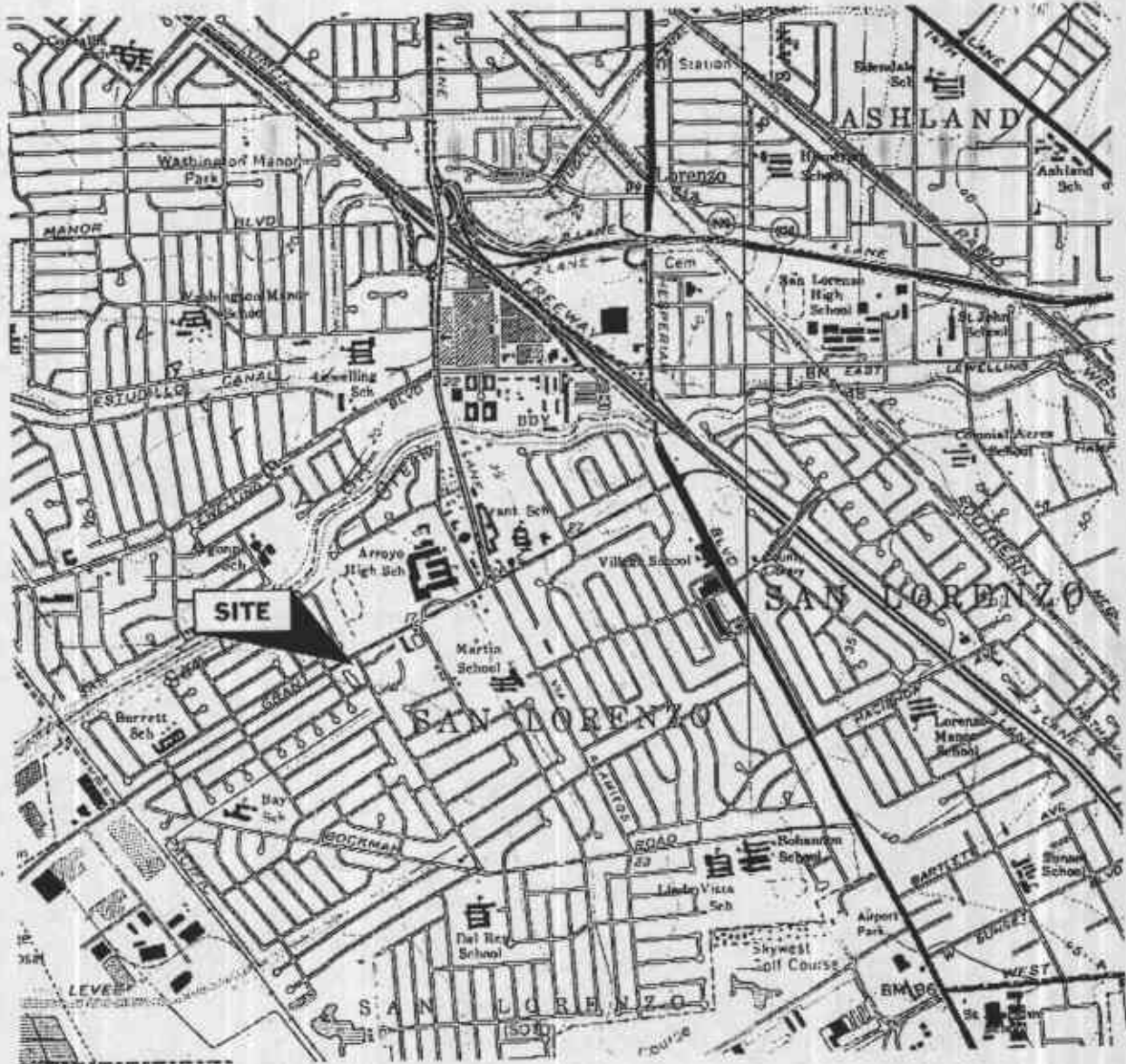


Enclosures

Cc: Mr. George Jaber, property owner



NORTH

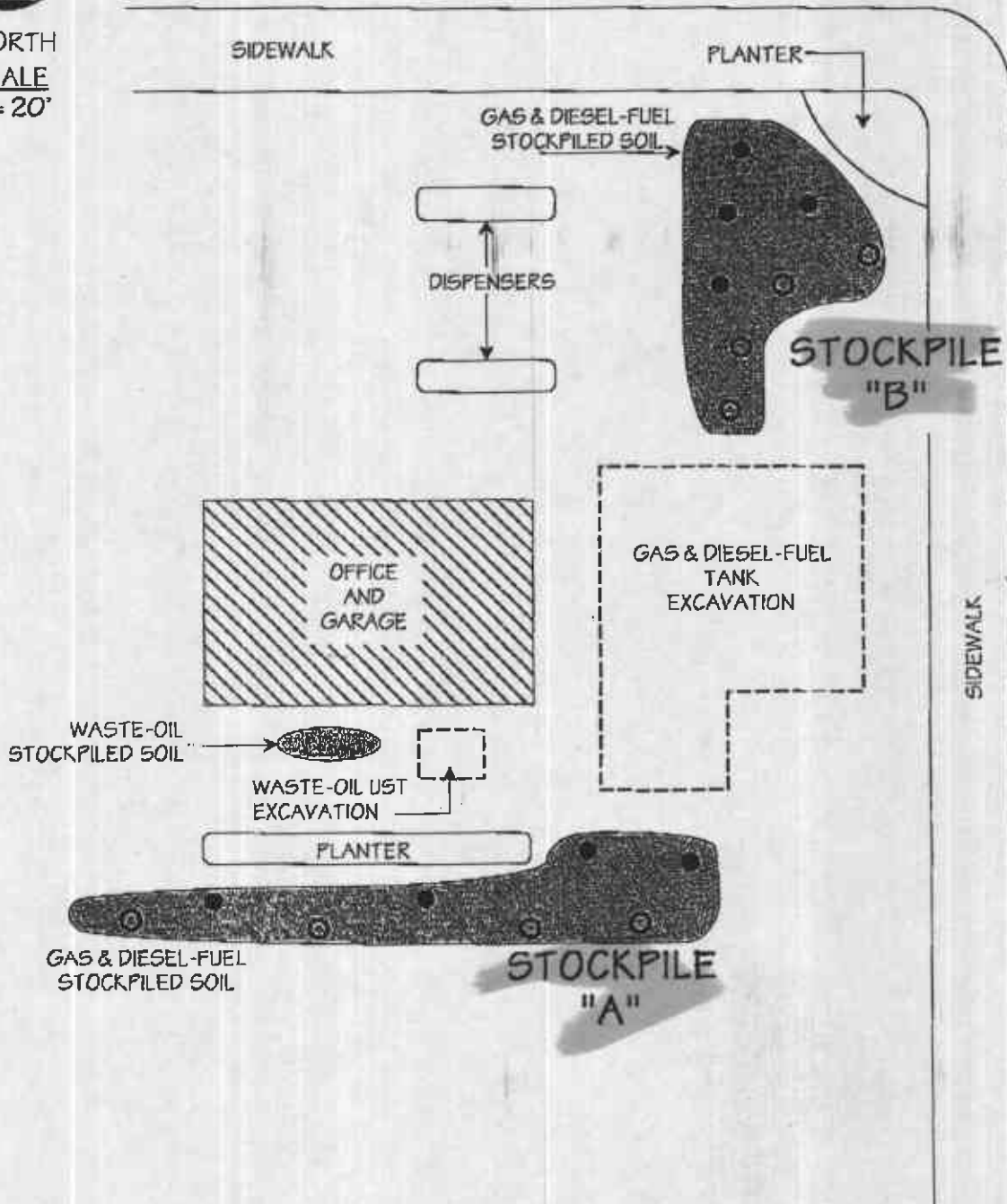


<b>LOCATION MAP</b>	
Olympic Service Station 1436 Grant Avenue San Lorenzo, California	
AQUA SCIENCE ENGINEERS, INC.	Figure 1



NORTH  
SCALE  
1" = 20'

# GRANT AVENUE



## LEGEND

- COMPOSITE SOIL SAMPLES 1-4
- COMPOSITE SOIL SAMPLES 5-8

## STOCKPILED SOIL SAMPLING MAP

Olympic Service Station  
1436 Grant Avenue  
San Lorenzo, California

## TABLE ONE

### Summary of Chemical Analysis of Stockpiled Soil Samples

TPH-G, TPH-D, BTEX, and MTBE

All results are in parts per million

SAMPLE NAME	TPH G	TPH D	BENZENE	TOLUENE	BENZENE	TOTAL XYLENES	MTBE
STKP-A (1-4)	<1.0	<b>62</b>	<0.005	<0.005	<0.005	<0.005	<0.005
STKP-A (5-8)	<1.0	<b>28</b>	<0.005	<b>0.055</b>	<b>0.026</b>	<b>0.066</b>	<b>0.012</b>
STKP-B (1-4)	<1.0	<b>220</b>	<0.005	<0.005	<0.005	<0.005	<0.005
STKP-B (5-8)	<1.0	<b>280</b>	<0.005	<0.005	<0.005	<0.005	<0.005
EPA METHOD	<b>8015M</b>	<b>8015M</b>	<b>8020</b>	<b>8020</b>	<b>8020</b>	<b>8020</b>	<b>8020</b>

**NOTES:**

Detectable concentrations are in bold.

Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.

**TABLE TWO****Summary of Chemical Analysis of Stockpiled Soil Samples****Total Lead****All results are in parts per million**

<u>SAMPLE NAME</u>	<u>TOTAL LEAD</u>
STKP-A (1-4)	<b>33</b>
STKP-A (5-8)	< 5
STKP-B (1-4)	<b>110</b>
STKP-B (5-8)	< 5
RESIDENTIAL PRG	130
EPA METHOD	7420

**NOTES:**

Detectable concentrations are in bold.

Non-detectable concentrations are noted by the less than sign (&lt;) followed by the laboratory reporting limit.

PRG stands for Preliminary Remediation Goal from the US EPA Region IX.



NOV -19' 98 (THU) 17:01 CHROMALAB, INC.

TEL: 510 4 1096

P. 003

**CHROMALAB, INC.**

Environmental Services (SOB)

November 19, 1998

Submission #: 9811187

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: OLYMPIC SERVICE STATION  
Received: November 12, 1998

Project#: 4306

re: One sample for Gasoline BTEX MTBE analysis.  
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: STKP-A(1-4)

Spl#: 215465

Sampled: November 11, 1998


Matrix: SOIL

Run#: 16067

Analyzed: November 19, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	99	1
MTBE	N.D.	0.0050	N.D.	78	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	93	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	92	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 2.0mg/Kg.



Vincent Vancil  
Analyst

Michael Verona  
Operations Manager

925-837-4853

1220 Quarry Lane • Pleasanton, California 94566-4756  
(925) 484-1919 • Facsimile (925) 484-1096  
Federal ID #88-0140157

PR V132 D:BTXACC0220  
00000 10-01

# CHROMALAB, INC.

**DRAFT**

Environmental Services (SDS)

November 19, 1998

Submission #: 9811197

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: OLYMPIC SERVICE STATION  
Received: November 12, 1998

Project#: 4306

re: One sample for Gasoline BTEX MTBE analysis.  
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: STKP-A(5-8)

Spl#: 215466

Sampled: November 11, 1998

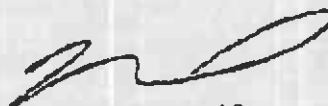
Matrix: SOIL

Run#: 16067

Analyzed: November 19, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIRE FACTOR (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	99	1
MTBE	0.012	0.0050	N.D.	78	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	0.055	0.0050	N.D.	93	1
ETHYL BENZENE	0.026	0.0050	N.D.	93	1
XYLENES	0.066	0.0050	N.D.	92	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 5.6mg/Kg. MTBE result draft pending GC/MS confirmation.

  
Vincent Vancil  
Analyst

Michael Verona  
Operations Manager

NOV. -19' 98 (THU) 17:01 CHROMALAB, INC.

TEL: 510 484 1096

P. 004

**CHROMALAB, INC.**

Environmental Services (SES)

November 19, 1998

Submission #: 9811197

AQUA SCIENCE ENGINEERS INC

Attn: Dave Allen

Project: OLYMPIC SERVICE STATION  
Received: November 12, 1998

Project#: 4306

re: One sample for Gasoline BTEX MTBE analysis.  
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: STKP-B(1-4)

Spl#: 215467


Matrix: SOIL

Sampled: November 11, 1998

Run#: 16067

Analyzed: November 19, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	99	1
MTBE	N.D.	0.0050	N.D.	76	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	93	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	92	1



Vincent Vancil  
Analyst

Michael Verona  
Operations Manager

NOV. -19 98 (THU) 17:00 CHROMALAB, INC.

TEL: 510 444 1096

P: 002

# CHROMALAB, INC.

Environmental Services (SES)

November 19, 1998

Submission #: 9811197

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: OLYMPIC SERVICE STATION  
Received: November 12, 1998

Project#: 4306

re: One sample for Gasoline BTEX MTBE analysis.  
Method: SW846 8020A Nov 1990 / 8015mod

Client Sample ID: STKP-B(5-8)

Spl#: 215468


Sampled: November 11, 1998

Matrix: SOIL

Run#: 16066

Analyzed: November 19, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	97	1
MTBE	N.D.	0.0050	N.D.	100	1
BENZENE	N.D.	0.0050	N.D.	95	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	89	1
XYLENES	N.D.	0.0050	N.D.	88	1

  
Vincent Vancil  
Analyst

Michael Verona  
Operations Manager

NOV. -19' 98 (THU) 17:02 CHROMALAB, INC.

TEL: 510 400 1096

P. 006

**CHROMALAB, INC.**

Environmental Services (SES)

November 19, 1998

Submission #: 9811197

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: OLYMPIC SERVICE STATION  
Received: November 12, 1998

Project#: 4306

re: 4 samples for TPH - Diesel analysis.  
Method: EPA 8015MMatrix: SOIL      Extracted: November 16, 1998  
Sampled: November 11, 1998      Run#: 15984      Analyzed: November 19, 1998

Sp#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
215465	STKP-A(1-4)	62	2.0	N.D.	79.4	2
Note: Hydrocarbon reported does not match the pattern of our Diesel Standard. Surrogate Recoveries biased high due to Hydrocarbon co-elution.						
215466	STKP-A(5-8)	28	5.0	N.D.	79.4	5
Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.						
215467	STKP-B(1-4)	220	20	N.D.	79.4	20
Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard. Surrogate Recoveries biased high due to Hydrocarbon co-elution.						
215468	STKP-B(5-8)	290	2.0	N.D.	79.4	2
Note: Surrogate Recoveries biased high due to Hydrocarbon co-elution.						

*Camp House*  
Camp House  
Analyst

Bruce Havlik  
Analyst

# CHROMALAB, INC.

Environmental Services (SES)

November 19, 1998

Submission #: 9611197

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: OLYMPIC SERVICE STATION  
Received: November 12, 1998

Project#: 4306

re: 4 samples for Lead analysis.  
Method: EPA 3050A/7420A

Matrix: SOIL      Extracted: November 16, 1998  
Run#: 15981      Analyzed: November 16, 1998  
Sampled: November 11, 1998

SPL#	CLIENT SPL ID	LEAD (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE DILUTION FACTOR
215465	STKP-A(1-4)	33	5.0	N.D.	100
215466	STKP-A(5-8)	N.D.	5.0	N.D.	100
215467	STKP-B(1-4)	110	5.0	N.D.	100
215468	STKP-B(5-8)	N.D.	5.0	N.D.	100

*Ch. Arndt*  
Christopher Arndt  
Analyst

*Michael Verona*  
Michael Verona  
Operations Manager