

## EXHIBIT 3A

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## CONFIDENTIAL NEUROPSYCHOLOGICAL EVALUATION

The following report is confidential and intended for use only by qualified professionals. Others, including the subject of the evaluation, should be discouraged from reading it without the assistance of a professional who is qualified to administer and interpret psychological tests. Should the subject of the report insist on obtaining a personal copy, psychological distress may result from misinterpretation or misuse of the information contained herein.

Name: Thomas Waite  
Birthdate:  
Age at Testing: 23 years, 6 months  
Handedness: Right  
Education: 14  
Occupation: Part-time student  
Marital Status: Single  
Date of Injury: 8/21/03  
Dates of Evaluation: 2/23/07, 2/24/07  
Psychometrist: Brian Douay, M.A.  
Neuropsychologist: Frederick Wise, Ph.D.

### REFERRAL

Thomas Waite was referred for neuropsychological evaluation by Ross White, attorney for defendants in pending litigation. Reason for referral was to assess possible cognitive and emotional sequelae to an 8/21/03 accident in which he fell from the bed of a pickup truck, sustaining a severe traumatic brain injury. He was administered a comprehensive battery of psychological and neuropsychological tests on 2/24/07. Clinical interview was conducted on 2/23/07 and he was administered a structured personality test (MMPI-2). In addition, various background records (to be detailed later in this report) were reviewed. All of the foregoing statements and conclusions are based on the above-noted material.

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### BACKGROUND DATA

Mr. Waite was interviewed on 2/23/07 and presented as a well-built, casually dressed male who appeared his stated age. He readily engaged in the interview process and provided the following information:

Psychosocial - He was born in Canoga Park, California and raised in Fullerton, California where he still resides. He has also lived in Utah and Spokane, Washington during his Mission for the LDS church. It was during this time that he was injured.

He currently lives with his parents in Fullerton, California. His father is an elementary school teacher and his mother works at a pharmacy in the greeting card department. He has one older brother. There is no reported familial history of learning disabilities, heritable neurological diseases, or psychiatric illness. He has never been married.

Education - Mr. Waite attended Raymond Elementary and then Acacia Elementary. He completed middle school at Ladera Vista Junior High. He graduated from Fullerton High School in 2001 and although he did not know his exact grade point average, he stated that it was "not great". He denied any specific difficulties learning, however, or special educational assistance. He described some of his difficulties in high school as related to psychosocial stressors including a friend moving away, his parents trying to home-school him, and then attempting independent instruction before returning in the last semester of his senior year to graduate with his class. He completed one semester at Fullerton Junior College before he went on his mission and returned to that institution shortly after returning from Montana. He added that he completes two classes per semester secondary to what his doctors have told him he could handle and that he attempted more coursework in the past semester, but could not do it. However, he also stated that one of the reasons that he had difficulties last semester was missing school secondary to appointments related to his current litigation such that he dropped several classes. When asked if he could have completed these courses had the litigation not been present, he replied that he would have done better and that regular conversations with his professors confirmed that missing classes was an important factor. He has no specific career plans or educational goals and so is presently taking general study courses.

Employment History - Beginning at the age of 15, he had worked at his grandfather's business (structural engineering) helping with surveying and some office work. He also worked in high school with a friend in a machine shop because he was interested in cars. Following return from his Mission, he did not want to work for his family and was employed part-time at a church bookstore doing inventory. He returned to work with his uncle in the grandfather's business because of the flexibility it afforded while he attended school, but his grandfather died in 12/06 and there was not enough work for him after that.

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Medical/Psychiatric History - Prior to the 8/21/03 accident, he denied closed head injuries, loss or alteration of consciousness for any reason, neurological diseases, regular medical treatment or medications for any reason, psychiatric illness or treatment, and alcohol/substance abuse. Medical history is remarkable for mild asthma for which he takes Q-Var and uses an Albuterol inhaler p.r.n. The only other injuries reported were a fractured arm while on some gymnastic equipment and some fractured knuckles in his right hand secondary to a high school fight. He suffered a seizure in 6/06 and has taken Dilantin since that time.

### INJURY AND SEQUELAE

Mr. Waite has no memory of the 8/21/03 fall from the bed of a pickup truck. He had difficulty estimating retrograde amnesia, but noted that this accident happened several days after his birthday and that he has no memory of his birthday. He has since learned that the pickup truck he was riding in was broad-sided at an intersection. His next memory is at Rancho Los Amigos in California where he found himself in a wheelchair and believed the reason he was in a hospital was for some pain in his stomach, later learning that this was the site of his feeding tube placement. Post-traumatic amnesia was thus estimated at between 3 and 4 months.

He denied any follow-up treatment after discharge from Rancho Los Amigos although apparently some speech therapy was recommended and he did not feel he needed it. He has taken Dilantin following his 6/06 seizure and believed that he took some other medications for a period of time, but could not recall what they were.

Mr. Waite reported the following changes in functioning which he directly attributed to the 8/21/03 MVA.

Physical - As previously noted, he has taken prophylactic seizure medications since 6/06. He noted significant physical deconditioning, muscle atrophy, and weight loss due to inactivity while in the hospital. He has some decreased left ear auditory acuity. He also reported complete anosmia since the accident. He denied significant post-traumatic headaches with the exception of a recent migraine. He added that he has had other headaches, but did not feel that this was an increase from his premorbid status.

Cognitive - He stated that while he was still hospitalized, he had "a real hard time to communicate and others wouldn't understand me". This was related to both word-finding difficulties and dysarthria. On a 1-10 scale with 10 representing as bad as his expressive language ever was, he currently rates himself at a "4". He also has problems comprehending what he reads or hears. As an example, he stated that he will listen in a group and think that he understands the concepts being discussed, but finds that others

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in the group disagree with him. He rates this at a "3" or "4". He reported some difficulties with memory/learning and said that he has to take detailed notes to help him recall. He keeps a notebook with him at all times, something that he had not done prior to the accident. Another example of memory difficulties is that his bishop told him that Mr. Waite could always remember a line from "The Simpsons" or from a movie that would be applicable to the discussion at hand. He is unable to do this now. He currently rates his memory at a "4" for approximately the last 6 months and believes that it has plateaued since that time. He also rates his concentration at a "6" and described greater difficulty focusing on such things as reading compared to pre-accident.

*Emotional* - He stated that he is "a little anxious and depressed in certain situations . . . like school . . . like comparing myself to others . . . I don't have as much confidence." He added that his doctors had told him that his confidence was less because it was harder for him to explain himself and communicate. He also is frustrated that he is unable to participate in some activities such as swimming and surfing due to the possibility that he may have a seizure. He takes his anti-seizure medication at 10 PM and the sedating effects restrict his ability to stay up late. He also noted that he feels he needs more sleep. He described himself as "never been much of a dater" and that he is now less optimistic about future socialization with the opposite sex. He is more frustrated than before the accident, but apparently has made a gradual adjustment to acquired difficulties and now estimates that he "lets things get to [him]" approximately once per month.

## RECORD REVIEW

The following records were reviewed:

American Medical Response: An 8/21/03 report states that Mr. Waite was found unconscious after an MVA that had occurred while he was riding in the back of a pickup truck. Irregular respiration and a laceration on the back of his head were noted. He was intubated and was able to move all extremities. A 9/10/03 note states that Mr. Waite was "transported via MedStar to California for continued care." During this transfer, he was noted to be "only appropriate ½ the time 2<sup>o</sup> to head injury."

Drs. MacKay, Meyer & Hahn/Deaconess Medical Center: An ER note dated 8/21/03 states that Mr. Waite had been brought in after flying out of the back of a pickup truck during an MVA and landing on his head. Lacerations were observed at his left eyebrow and anterior scalp area. On arrival, he was moving all extremities spontaneously and appeared to be making some purposeful movements toward his endotracheal tube. GCS was estimated at 7 and pupils were round and reactive. A head CT showed bifrontal small hemorrhagic contusions, extensive diffuse subarachnoid hemorrhage, and suboccipital nondisplaced calvarial fracture. No midline shift was seen. Impression was of multitrauma and he was transported

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to the ICU for further care. A CT of the facial bones was negative. Aspiration pneumonitis and a splenic contusion were seen on CT scans of the chest, abdomen, and pelvis. A cervical spine CT showed slight kyphotic deformity at the C5-6 level. Alexander MacKay, M. D. (Neurosurgery) saw Mr. Waite in the ER on 8/21/03. Note states that Mr. Waite "apparently was riding unrestrained in the back of a pickup truck . . . he was thrown out and sustained a head injury . . . has been intubated and has been giving a long acting paralytic agent". Dr. MacKay was unable to perform a full evaluation and recommended that Mr. Waite remain in the ICU for maintenance. Assessment of Shane McNevin, M. D. on 8/21/03 was of traumatic intraparenchymal hematoma and subarachnoid hemorrhage, occipital fracture, probable aspiration pneumonia, and grade 2 intraparenchymal splenic hematoma. Operative report from an 8/22/03 placement of a right frontal Camino ICP monitor was reviewed. Pre- and post-operative diagnoses were Closed Head Injury and Cerebral Edema. An 8/22/03 head CT showed progression of multiple hemorrhagic frontal lobe contusions, diffuse subarachnoid hemorrhage, and diffuse cerebral edema. These were stable on an 8/23/03 head CT and an 8/25/03 head CT showed no significant interval change. An 8/27/03 head CT raised concern for increasing intracranial pressure as evidenced by poorer visualization of the basilar cisterns. These were slightly better defined on an 8/29/03 head CT and continued improvement was seen on 9/3/03. He was extubated on 8/31/03 and was felt to have continually stabilized and improved. At a 9/1/03 psychiatry consultation with Vivian M. Moise, M. D., impression was of a "very severe brain injury associated with severe brain edema and bilateral frontal cerebral contusions . . . primarily now demonstrating a frontal deficit of agitation, impulsivity, and general bilateral cortical deficits of severe impairment of attention and memory abilities . . . also has mild hemiparesis, but strengths include ability to follow commands well and already having the presence of immediate memory and very good preserved language and speech abilities . . . prognosis for making at least a 90% recovery back to normal functioning is excellent in my opinion . . . although I suspect that he will have some life-long residual deficits". Recommendations were for an endoscopic gastrostomy tube, one-on-one nursing, intensive inpatient rehabilitation, Trazodone, and further consultations. Persistent kyphotic deformity at the C5-6 level with mild anterior wedging of the C6 vertebral body and widening of the C5-6 interspinous distance was seen on a 9/2/03 cervical spine X-ray. At a 9/3/03 speech therapy evaluation, he showed restlessness, inconsistent/latent responses, inability to identify his father, and disorientation in all spheres. He was up and walking during physical therapy on 9/5/03. Assessment on 9/5/03 was of severe head injury improving slowly. Continued improvement of the small left posterior fossa epidural hematoma was seen on a 9/7/03 head CT. During a 9/9/03 speech therapy session, he was "speaking with clear speech, but often non-sensical confused comments and verbal outbursts." A discharge summary dated 9/10/03 by Jeffrey C. Elmer, M. D. noted "a fair amount of agitated delirium . . . [which] can be redirected." No seizures were reported and he was being discharged to a treatment facility in California in order to be closer to his family. Discharge diagnoses were of Closed Head Injury (bifrontal and temporal lobe contusions, left posterior fossa epidural hematoma noted); Possible Ligamentous Injury of Cervical Spine at C5-6; Occipital Fracture; Aspiration

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Pneumonia Secondary to Loss of Consciousness; and Grade II Intrapertitoneal Splenic Hematoma. Discharge medications were listed as Dilantin and Trazodone.

Northwest MedStar: Records from the 9/10/03 transfer between treatment facilities were reviewed. Mr. Waite was noted to be impulsive with poor memory.

Schaefer Ambulance: Records from the 9/10/03 transfer between facilities were reviewed.

Rancho Los Amigos National Rehabilitation Center: Mr. Waite was admitted on 9/10/03 and "prolonged periods of agitated delirium" were noted. History of asthma, but no history of seizures was noted. Admission assessment was of traumatic brain injury with subarachnoid hemorrhage; bilateral frontal and bilateral temporal contusions; left posterior fossa epidural; occipital skull fracture; status post-aspiration pneumonia; confusion and agitation, at times severe; right greater than left spasticity in lower extremities; C5-6 possible ligamentous laxity (in hard cervical collar); status post splenic trauma, stage II hematoma; and ecchymosis related to traumatic removal of a jejunostomy tube. Full evaluation to assess rehabilitation needs was planned. Medications were listed as Ativan, Trazodone, and Tylenol with Codeine. A preliminary communication evaluation dated 9/10/03 and signed by William Boelter, M. D. describes Mr. Waite as being "inconsistently oriented to person & no other aspect . . . fleeting attention [with] max sustained attention of 3 minutes." Rehabilitation in areas of auditory comprehension, verbal expression, social interaction/pragmatics, attention, orientation, memory, and problem solving was planned. Cooperative interludes with persistent agitation were noted on 9/11/03. Ligamentous laxity was also described. He was started on BuSpar. A 9/12/03 physical therapy evaluation resulted in assessment of "high level TBI, poor balance, PF weakness & cognitive limitations." Severe agitation was noted on 9/13/03, but he was off Ativan by 9/14/03. Agitation was noted to be much improved by 9/15/03 and medications were listed as BuSpar, Risperdal, and Trazodone. He accidentally dislodged a feeding tube on 9/16/03. A hearing evaluation also on this date revealed left-sided hearing loss. Severe agitation was again noted on 9/18/03 and BuSpar dosage was increased. Orientation was improved on 9/22/03. A 9/22/03 cervical spine X-ray showed normal flexion and extension. Short temper and lowered patience, consistent with a frontal lobe injury, were noted on 9/25/03 and a head CT continued to show encephalomalacia.

An abbreviated neuropsychological evaluation was completed on 9/30/03 by Danielle Dildine, Psy. D. to establish a baseline level of cognitive functioning. At this time, he reported occasionally losing balance ("has noticed a considerable decrease in this problem over the last few days"), an "itching" pain in his stomach where his feeding tube had been located, "double vision when attempting to focus on an object", decreased visual acuity with increased distance, frequent dizziness, "inability to 'remember recent stuff'", difficulty recalling names of acquaintances, inability to recall selective information from his past (i.e., the year of his graduation), slowed thinking, fatigue, decreased ability to sustain attention, and occasional word substitutions. While giving his academic history, Mr. Waite did report

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some difficulties in school secondary to distractibility and added that he had "always had difficulty with mathematics". He also described a fight during his sophomore year of high school and his parents' "concern[s] about his escalating anger and the negative response he received from both teachers and peers after the fight." He denied any current depression or anxiety.

Tests revealed borderline scores on tests of simple and complex visual attention; low-average intellectual functioning; relative weaknesses in abstract thinking, visual motor-spatial analysis, complex visual tasks, and synthesis of abstract designs; impaired paragraph recall; evidence for retrieval problems on list-learning tasks; difficulties with memory recall for detailed visual information; possibly compromised remote memory; verbal organizational deficits; mild verbal disinhibition; low-average verbal reasoning; and average to low-average visual reasoning. Overall, testing results were felt to reveal cognitive impairments consistent with an acute diffuse traumatic brain injury. Dr. Dildine predicted lingering deficits in attention and memory. Diagnoses were of Traumatic Brain Injury with Deficits in Complex Attention, Speed of Processing, Mental Organization, and Memory Retrieval; Severe Traumatic Brain Injury; and Cognitive Limitations and Loss of Independence. Recommendations were made for neuropsychological re-evaluation, use of memory aids, concrete structured tasks, and avoidance of time demands during complex tasks.

A 10/2/03 head CT showed encephalomalacia in the frontal lobes in the distribution of the anterior cerebral artery and a small area of encephalomalacia at the tip of the left temporal lobe associated with mild dilation of the left temporal horn. A 10/2/03 discharge note signed by Dr. Boelter describes a head CT showing encephalomalacia in both frontal lobes with some atrophic changes (right greater than left), especially in the anterior frontal lobes above the orbital roof. Physical therapy discharge states that all stated goals were met. Cognitive/communication skills discharge states that Mr. Waite had made strong gains since admission, but continued to require cues to remember the date, exhibit word-finding/organization/processing difficulties, memory problems, and overall mild cognitive deficits. Outpatient speech therapy was recommended. A second discharge summary dated 10/2/03 notes left-sided high-tone sensorineural hearing loss, ability to follow multiple-step commands, ability to comprehend simple conversation, and functional ability to read. He was noted to have showed improvements in physical therapy, occupational therapy, and had participated in several community outings. Final diagnoses were of Traumatic Brain Injury Secondary to Motor Vehicle Accident on 8/21/03, Bilateral Frontal and Temporal Lobe Contusions, Posterior Fossa Epidural Hematoma - Resolved, Status Post-Jejunostomy Tube, Status Post-Splenic Hematoma, and Occipital Skull Fracture. Medications were listed as BuSpar, Dilantin, Risperdal, and Trazodone. Recommended follow-up care included planned evaluations for speech and cognitive therapy. He was advised not to drive for a year and refrain from returning to his mission trip for at least 6 months.

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At a 10/14/03 follow-up visit, he stated that dizziness was improved and was assessed with TRI with frontal and temporal contusions, much improved agitation/confusion, and improved spasticity. Seizure prophylaxis were given and he was started on Risperidone. Follow-up visits dated 10/21/03 (slight improvement in left ear hearing) and 11/3/03 (elevated liver enzymes noted), 1/6/04 (improving tinnitus and dizziness noted; had been tapered of BuSpar; no seizures reported; "good improvement in cognitive areas + physical") were reviewed. Speech, occupational, and physical therapy notes along with social work notes dated throughout the course of treatment were reviewed.

St. Jude Hospital and Medical Center: A 6/3/06 ER visit was subsequent to a seizure. Note states that this was Mr. Waite's first seizure and that he was vomiting. Noting his "previous history of significant head trauma", Erwin Song, M. D. stated that Mr. Waite's "family heard a thud and found him with questionable tonic clonic activity for several seconds and now the symptoms are resolved. Sudden in onset, moderate to severe." He had another seizure after admittance and was given Ativan and Dilantin. A head CT revealed bilateral frontal encephalomalacia. Impression was of seizure.

Kaiser Permanente Medical Center: Mild left-sided hearing loss, decreased taste, concentration/attention span deficits, and memory loss were reported on 10/30/03 to S. Chung, M. D. Medications were listed as Azmacort, Ventolin, BuSpar, Trazodone, and Risperdal on 11/3/03. A note dated 11/3/03 by Susan E. Skinner, M. D. states, "He has had a marked improvement of his neurological functioning . . . [we] agreed that we would send him for speech therapy for an evaluation with the recognition that there may not be any further need for speech therapy . . . I feel he is safe to drive". Anxiety and depression were discussed and he was being tapered off Risperdal and Dilantin. At an 11/5/03 speech therapy consultation, he reported difficulties with multi-tasking, organization of thoughts, focus, and short-term recall although no need for speech therapy was assessed. An 11/26/03 visit with Dr. Chung concerned a skin lesion. At a 12/22/03 visit with Dr. Skinner, impression was of status post closed-head injury "with excellent recovery." Dr. Skinner added, "From a neurological standpoint, he is cleared to return to his mission work with the Mormon Church." A 1/12/04 note by Dr. Chung states that he was "doing fine". A 1/12/06 note by Dr. Skinner states that Mr. Waite suffered from "very minimal neurological sequelae [to the 2003 MVA] including a slight loss of hearing in the left ear and a described decrease of taste and smell . . . he has been remarkably fortunate neurologically and is very functional by his description. No further intervention is necessary." Mr. Waite was admitted to the ER on 6/3/06 with "generalized tonic/clonic" activity and confusion. Medications were listed as Ativan, Dilantin, Q-Var, and an Albuterol inhaler. A head CT showed frontal encephalomalacia. Impression was of seizure and hematemesis. A 6/12/06 note by Dr. Skinner states that on 6/3/06, Mr. Waite was "noted to be confused and vomiting at 4:00 AM when the mother went into the room there was actually a wet spot on the bed . . . continued to vomit . . . [she was] preparing to take him to the emergency room when he had a witnessed generalized tonic-clonic seizure . . . [with] tongue biting . . . was postictal after . . .

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has no recollection of this." Impression was of new onset generalized tonic-clonic seizure and a seizure workup was planned. A 6/27/06 head CT showed evidence of encephalomalacic changes in both frontal lobes. A 7/18/06 EEG was abnormal, showing sharp wave activity in the left temporal and frontal head regions. No further seizures were reported at a 7/28/06 visit and he was felt to be doing well.

Spokane Valley Earn, Nose & Throat: A 6/17/04 hearing evaluation resulted in recommendation of a hearing aid in Mr. Waite's left ear to compensate for constant ringing and hearing loss.

Care Ambulance Service, Inc.: A 6/3/06 note indicates that Mr. Waite was transported to the hospital after a seizure.

Marina Medical Building: Billing records dated 6/3/06 through 10/16/06 were reviewed.

William Boelter, M. D.: On a 1/04 driver medical evaluation, Dr. Boelter noted dizziness and left-sided hearing loss. He concluded that Mr. Waite had "recovered dramatically from what could potentially have been a severely disabling brain injury . . . [he] may well be able to drive a motor vehicle safely, but should . . . have an evaluation behind the wheel with a trained OT post-TBI evaluator."

David Middleton, Ph. D.: A psychological evaluation by Dr. Middleton who was identified as a member of Mr. Waite's church was reviewed. A letter summarizing neuropsychological evaluation of Mr. Waite (testing dates listed as 12/7/03, 12/15/03, 12/16/03; letter dated 12/19/03) states that he was "cognitively and psychologically capable of returning to his missionary service . . . [with] performance on nearly all measures of neuropsychological functioning . . . within what is considered the 'normal range.'" Below-average scores were recording on the Arithmetic subtest of the WAIS-R ("consistent with premorbid functioning") and a 10<sup>th</sup>-percentile score on the Verbal Memory section of the WMS-R ("does appear to represent a significant decline from premorbid functioning . . . appears directly attributable to the traumatic brain injury"). He was found to be functioning in the normal range of intelligence and MCMI-II results were felt to be reflective of premorbid personality traits. Visual aids were recommended to assist with verbal memory and Dr. Middleton concluded, "the results of this evaluation demonstrate objectively a remarkable recovery from a severe brain injury." Dr. Middleton's bill also includes "Family meeting at Rancho Los Amigos" (10/1/03) and "Cognitive Rehabilitation therapy" (10/15/03, 10/23/03, 11/23/03, 11/30/03, 12/17/03, 12/22/03), but records from these sessions were not available for review. [It should be noted that this was not a comprehensive neuropsychological examination, nor did it appear that Dr. Middleton was a trained neuropsychologist.]

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William A. Burkhardt, Ph. D.: Raw data from 10/06 neuropsychological testing was reviewed, but a report from this was not provided.

Fullerton Union High School: Transcripts dated 1997 through 2001 give a cumulative GPA of 2.6154.

Fullerton College: Transcripts dated Spring 2002 give a GPA of 2.50.

A deposition of Mr. Waite dated 10/17/06 was reviewed.

A deposition of Carol Waite dated 10/17/06 was reviewed.

Plaintiff's identification of expert witnesses and disclosure of experts' preliminary reports was reviewed.

#### **BEHAVIORAL OBSERVATIONS AND MENTAL STATUS EXAM**

Psychometrist's observations during testing on 2/24/07 indicated that Mr. Waite established rapport easily and showed excellent effort throughout a lengthy day of testing. He tolerated frustration well, understood instructions easily, and was well-focused. Because of multiple previous neuropsychological examinations, he recognized most of the test materials and practice effects were considered in interpretation. No extraneous factors which would adversely effect test administration and/or interpretation were observed although he mentioned some hearing loss which did not appear to negatively impact examination. As such, results are felt to be a valid representation of his current cognitive functioning.

#### **PROCEDURES**

CLINICAL INTERVIEW

REVIEW OF RECORDS

TESTS ADMINISTERED:

Intellectual

Wechsler Adult Intelligence Scale - III

Academic

Wide Range Achievement Test - 3

Neuropsychological

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Wechsler Memory Scale - III  
Stroop Test (Dodrill Version)  
d2 Test  
Symbol-Digit Modalities Test  
Wisconsin Card Sorting Test  
Controlled Oral Word Association Task  
California Verbal Learning Test  
Halstead-Reitan Neuropsychological Test Battery  
    Category Test  
    Tactual Performance Test  
    Seashore Rhythm Test  
    Speech Sounds Perception Test  
    Finger Oscillation Task  
Trail Making Test  
Lateral Dominance Examination  
Sensory Perceptual Examination

Personality/Emotional/Motivational

Minnesota Multiphasic Personality Inventory - 2  
Symptom Checklist  
CARB  
WMT

ANALYSIS OF TEST RESULTS

Mr. Waite indicated that he had been administered numerous prior batteries of neuropsychological tests including those with William Burkhardt, Ph. D.; David Middleton, Ph. D.; Angelique Tindall, Ph. D.; and Dwayne Green, Ph. D. Raw data from prior examinations with Dr. Burkhardt and Dr. Middleton were reviewed and compared to the current data obtained. If and when the data from other examinations is made available, adjustments to the following interpretation may be made.

Intellectual Functioning

On the Wechsler Adult Intelligence Scale - III, Mr. Waite earned a Verbal IQ of 115 (84<sup>th</sup> percentile), a Performance IQ of 105 (63<sup>rd</sup> percentile), and a Full-Scale IQ of 111 (77<sup>th</sup> percentile). These are in the high average, average, and high average ranges respectively. Analysis of the Verbal subtests showed mild intertest scatter with relative strengths on tasks tapping short-term auditory memory (high average) and knowledge of appropriate social conventions (superior range). Performance Subtests measuring his ability to analyze, synthesize, and reason using

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non-verbal information also showed mild intertest scatter and it should be noted that some practice effects are typically expected.

Age-related subtest scores were as follows:

<u>VERBAL TESTS</u>	<u>SCORES</u>	<u>PERFORMANCE TESTS</u>	<u>SCORES</u>
Vocabulary	13	Picture Completion	12
Similarities	12	Digit Symbol Coding	10
Arithmetic	10	Block Design	10
Digit Span	13	Matrix Reasoning	12
Information	12	Picture Arrangement	10
Comprehension	15	Symbol Search	13
Letter Number Sequencing	12		

The above were reflected in factor analytically derived Index Scores:

INDEX SCORES

Verbal Comprehension	112	79 <sup>th</sup>	Percentile
Perceptual Organization	107	68 <sup>th</sup>	Percentile
Working Memory	109	73 <sup>rd</sup>	Percentile
Processing Speed	108	70 <sup>th</sup>	Percentile

A brief battery of neuropsychological tests was administered on 9/30/03 while he was at Rancho Los Amigos Rehabilitation Center. No raw data was available, but his IQ was estimated to be in the low average range. 12/03 testing with Dr. Middleton using the WAIS-R indicated a VIQ of 102, PIQ of 98, and a FSIQ of 101. 10/06 testing with Dr. Burkhardt did not include intellectual assessment and no data from Drs. Tindall or Green was available for review. It is expected, however, that there were practice effects, particularly on Performance subtests, and further interpretation awaits the above-noted data.

Academic Achievement

On the Wechsler Individual Achievement Test - II, Mr. Waite earned Word Recognition, Spelling, and Arithmetic subtest scores at the 75<sup>th</sup>, 19<sup>th</sup>, and 81<sup>st</sup> percentiles respectively. These are generally consistent with reported academic matriculation although clearly demonstrate relative weakness in spelling abilities. There was no other academic achievement testing from prior examinations.

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Memory Functioning

On the Wechsler Memory Scale - III, Mr. Waite clearly showed relative strength (above average to superior range) in visuospatial memory as compared to auditory verbal memory. This was true at both immediate and delayed recall intervals. Again, some practice effects for visuospatial memory are expected. Dr. Middleton administered a previous version of this test (WMS-R) and opined that there was a significant decline in verbal memory, consistent with his parents' report.

WMS-III Primary Index Scores

Auditory Immediate	89	23 <sup>rd</sup>	Percentile
Visual Immediate	130	98 <sup>th</sup>	Percentile
Immediate Memory	110	75 <sup>th</sup>	Percentile
Auditory Delayed	102	55 <sup>th</sup>	Percentile
Visual Delayed	115	84 <sup>th</sup>	Percentile
Auditory Recognition Delayed	110	75 <sup>th</sup>	Percentile
General Memory	111	77 <sup>th</sup>	Percentile
Working Memory	105	63 <sup>rd</sup>	Percentile

He was also given another verbal learning/memory task (California Verbal Learning Test - II) where he was required to learn a list of 16 shopping items over a series of 5 repeated presentations. He learned 7 at the first trial and 12 by the fifth trial. His retention of this information after proactive interference was 10 and he recalled 9 at an intermediate delayed interval. He showed good discriminability and recognized all 16 from a larger distracter list. These scores are in the low average to average range and are generally consistent with his scores on a similar task (RAVLT) in 10/06.

Tactile-spatial memory on the Tactual Performance Test was in the average range for number of shapes recalled (7 of 10) and mildly impaired for their relative localization in space (3 of 10). Low average visuospatial memory on the Rey-Osterreith Complex Figure were recorded in 10/06. Incidental memory on simple cognitive-flexibility tasks at the current testing was within normal limits.

Adaptive Problem-Solving Abilities

Mr. Waite demonstrated consistently intact attention and concentration on simple cognitive flexibility tasks involving alternating response sets. However, some impulsive errors in modulating speed vs. accuracy were seen. Some evidence of this was also seen in 10/06 although not consistently across measures sensitive to this cognitive construct.

His abilities to solve more complex problems requiring generation of an effective strategy, generalization from information he learned, and adaptation as task demands changed were

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intact and generally within the average range. These tests have significant practice effects, however, and may be somewhat of an overestimation of his abilities if they were administered at prior examinations with Drs. Green and/or Tindall.

#### Language Functioning

There was no evidence of expressive or receptive language dysfunction during clinical interview or on tests administered. He showed good verbal fluency and ability to discern nonsense speech sounds from a pre-recorded tape. Verbal fluency in 10/06 was also in the average to above average range.

#### Motor/Sensory-Perceptual Functioning

Mr. Waite is strongly right-handed and showed the preferred-hand dominance in grip strength, fine-motor coordination as tested by a finger oscillation task, and name writing. There were no suppressions under conditions of bilateral sensory stimulation in tactile and visual modalities, but one left-sided (consistent with his report) auditory suppression. The above are intact and do not implicate lateralized cerebral hemispheric impairment.

#### Personality/Emotional/Motivational Functioning

Mr. Waite was administered a structured personality test (Minnesota Multiphasic Personality Inventory - 2) to assess current emotional functioning and underlying personality traits. He responded in an honest, consistent fashion producing a valid and interpretable profile. Lower than expected psychological sophistication and coping skills were suggested. Individuals with similar profiles tend to be sensitive to criticism, lack self-confidence, feel uneasy in social situations, and ruminate over psychosocial stressors. Cognitive complaints are also frequent, particularly relating to memory and concentration. They may express low energy and/or motivation. Some somatic complaints in the form of fatigue and not feeling in good health are also indicated from this profile.

He was also instructed to complete a 30-item Symptom Checklist containing cognitive and emotional items. His responses clearly indicated attribution of his perceived difficulties to the 8/03 accident. Two symptom validity tasks to evaluate motivation and effort were administered and his scores did not suggest intentional distortion.

9/03 personality testing (Beck Depression Inventory - II) and clinical interview did not suggest anxiety or depression despite significant cognitive difficulties. A Millon (MCMI-II) in 12/03 noted "personality problems related to social acceptance and coping with interpersonal distress", but clinical interview with Mr. Waite's parents did not suggest traumatically-induced personality change. An MCMI-III was given in 10/06 and also noted personality traits of avoidance and dependence in the context of some anxiety and dysthymia.

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### SUMMARY AND INTERPRETATION

Thomas Waite is a 23-year-old, right-handed male who sustained a severe traumatic brain injury secondary to a motor vehicle accident on 8/21/03. Injuries included intraparenchymal hematoma, subarachnoid hemorrhage, occipital skull fracture, aspiration pneumonia, and grade II splenic hematoma. He was intubated for 10 days and transferred for inpatient rehabilitation at Rancho Los Amigos on 9/11/03 and discharged on 10/2/03 although followed on an outpatient basis through 1/6/04. A head CT showed bilateral frontal encephalomalacia. He subsequently suffered a generalized tonic-clonic seizure on 6/3/06 and has been receiving prophylactic anti-seizure medication (Dilantin) since that time. Previous medications for sleep, anxiety, and agitation were eventually discontinued. At the time of the current evaluation, he reported numerous physical (seizure disorder, deconditioning/weight loss during hospitalization, decreased left-sided auditory acuity); cognitive (gradually resolving expressive language, comprehension, memory, concentration/focus impairments); and emotional (anxiety, frustration, mild lability, depressive-like symptoms) sequelae which he directly attributed to the above injury accident.

Mr. Waite was administered a comprehensive battery of psychological and neuropsychological tests on 2/24/07. Raw data from a screening evaluation in 12/03 with Dr. Middleton and test scores from Dr. Burkhardt's 10/06 evaluation were compared to current scores. Unfortunately, not all reports or raw data from what appears to be four prior psychological or neuropsychological evaluations were available and as such, some adjustment of interpretation may be necessary if and when that data is received. Current testing revealed an individual of average to above-average intelligence with better verbal as compared to non-verbal skills. These scores indicate recovery from 12/03 testing although it is likely that some practice effects from other examinations are reflected here. Results from academic achievement testing are generally commensurate with academic matriculation and transcripts reviewed with reading and arithmetic skills in the above average range. Low average spelling was recorded, but this is not judged to be an acquired weakness. He showed excellent non-verbal learning/memory (average to superior range), in contrast to average range non-verbal memory. Attentional skills were generally intact although some mild impulsivity and dysregulation were also noted. His complex problem-solving skills were within normal limits. There was no evidence of expressive or receptive language dysfunction during clinical interview or on tests administered. Cursorry sensory perceptual and motor examination were intact and did not indicate lateralized cerebral hemispheric impairment. Overall, the above data indicate mild relative inefficiencies in non-verbal memory/learning and there is some suggestion of mild executive dysfunction although not at a level that would appear to be significantly limiting.

From an emotional standpoint, Mr. Waite reported frustration with his acquired physical and cognitive limitations, but denied frank depressive symptomatology in the form of vegetative

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symptoms. He was less optimistic about his future and this appears to be exacerbated by pre-morbid personality traits. Prior examinations also did not suggest personality change or significant anxiety or depression.

In summary, Mr. Waite has made a remarkable recovery from a severe traumatic brain injury secondary to the 8/21/03 MVA. Residual cognitive dysfunction in the form of mild non-verbal memory/learning and executive impairment were suggested from current testing, but not at levels which would obviously impair activities of daily living. Nevertheless, there was no evidence of exaggeration, intentional distortion, or malingering and it is reasonable to assume that his greater degree of cognitive fatigue and problems concentrating/focusing at times are legitimate sequelae considering the nature and severity of his traumatic brain injury. In that regard, he may benefit from a course of outpatient rehabilitation-oriented therapy focusing on compensatory skills, adaptation, and occupational planning. Emotional status should be closely monitored as he faces the challenges of school and work. It appears that his recent failed attempt to increase his course load at school was related to interruptions in attendance due to litigation appointments in Seattle, but efforts to prepare him for further academic and eventual occupational integration are recommended. No other neuropsychological, psychopharmacological, or psychotherapeutic intervention appears warranted at this time. It should also be noted that despite his relatively good current cognitive and emotional status, he did indeed sustain a severe traumatic brain injury and what appears to have been a gradual and psychologically stressful recovery.



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